Canon

PowerShot SX120 IS
Camera User Guide

- Make sure you read this guide before using the camera.
- Store this guide safely so that you can use it in the future.

Checking the Package Contents

Check if the following items are included in your camera package. If anything is missing, contact the retailer from which you purchased the camera.

Camera

AA-size Alkaline Batteries (×2)

Memory Card

Interface Cable IFC-400PCU

AV Cable AVC-DC400

Wrist Strap WS-800

Getting Started

DIGITAL CAMERA Solution Disk

Warranty Card

"Canon Customer Support" Leaflet

Using the PDF Manuals

Also refer to the PDF manuals on the CD-ROM. After installation, shortcut icons appear on the desktop. If the software installation fails, you can find the manuals in the Readme folder on the CD-ROM.

● **Camera User Guide (This Guide)**
  Once you have mastered the basics, use the camera's many features to shoot more challenging photos.
● **Personal Printing Guide**
  Read when you want to connect the camera to a printer (sold separately) and print.
● **Software Guide**
  Read when you want to use the included software.

- You can use the included memory card to try out your new camera and take some test shots.
- Adobe Reader is required to view the PDF manuals.

Read This First

Test Shots

Take some initial test shots and play them back to make sure the images were recorded correctly. Please note that Canon Inc., its subsidiaries and affiliates, and its distributors are not liable for any consequential damages arising from any malfunction of a camera or accessory, including memory cards, that results in the failure of an image to be recorded or to be recorded in a way that is machine readable.

Warning Against Copyright Infringement

The images recorded with this camera are intended for personal use. Do not record images that infringe upon copyright laws without the prior permission of the copyright holder. Please be advised that in certain cases the copying of images from performances, exhibitions, or commercial properties by means of a camera or other device may contravene copyright or other legal rights even if the image was shot for personal use.

Warranty Limitations

This camera's warranty is only effective in the country of sale. If there is a problem with the camera while abroad, please return it to the country of sale before proceeding with a warranty claim to a Canon Customer Support Help Desk. For Canon Customer Support contacts, please see the customer support list supplied with your camera.

LCD Monitor

- The LCD monitor is produced with extremely high-precision manufacturing techniques. More than 99.99% of the pixels operate to specification, but occasionally non-performing pixels may appear as bright or dark dots. This is not a malfunction and has no effect on the recorded image.
- The LCD monitor may be covered with a thin plastic film for protection against scratches during shipment. If so, remove the film before using the camera.

Camera Body Temperature

Please take care when operating the camera for an extended period as the camera body may become warm. This is not a malfunction.

Memory Cards

The various types of memory cards that can be used in this camera are collectively referred to as memory cards in this guide.

What Do You Want to Do?

Shoot

Take good people shots

Portraits (p. 56)	At night (p. 56)	Kids and pets (p. 56)	At the beach (p. 58)	Against snow (p. 59)

Take good landscapes

Landscape (p. 56)	Sunsets (p. 58)	Night Scene (p. 58)	Foliage (p. 59)

Shoot various other scenes

Indoors (p. 57)	Fireworks (p. 58)	Aquarium (p. 58)	Low light (p. 59)

View

Shoot/View Movies
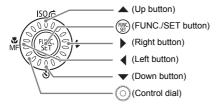
Print

Save

Other

Table of Contents

Chapters 1 – 3 explain the basic operations and frequently used functions of this camera. Chapters 4 onward explain the advanced functions, letting you learn more as you read each chapter.

Conventions Used in this Guide

- Icons are used in the text to represent the camera buttons and switches.
- Language that displays on the screen appears inside [ ] (square brackets).
- The directional buttons, control dial, and FUNC./SET button are represented by the following icons.

▲ (Up button)
(FUNC./SET button)
▶ (Right button)
◀ (Left button)
▼ (Down button)
(Control dial)

- ❓ : Troubleshooting tips.
- ❥ : Hints for getting more out of your camera.
- ⓘ : Things you should be careful about.
- ✐ : Supplemental information.
- (p. xx): Reference pages. "xx" stands for page number.
- This guide assumes all functions are at their default settings.

Safety Precautions

- Before using the camera, please ensure that you read the safety precautions described below. Always ensure that the camera is operated correctly.
- The safety precautions noted on the following pages are intended to prevent injuries to yourself and other persons, or damage to the equipment.
- Be sure to also check the guides included with any separately sold accessories you use.

⚠ **Warning** Denotes the possibility of serious injury or death.

⚠ **Caution** Denotes the possibility of injury.

Caution Denotes the possibility of damage to the equipment.

⚠ Warning

Camera

- **Do not trigger the flash in close proximity to human eyes.**
  Exposure to the intense light produced by the flash could damage eyesight. In particular, remain at least one meter (39 inches) away from infants when using the flash.

- **Store this equipment out of the reach of children and infants.**
  Strap: Putting the strap around a child's neck could result in asphyxiation.
  Memory card, day/date battery: Dangerous if accidentally swallowed. If this occurs, contact a doctor immediately.

- **Do not attempt to disassemble or alter any part of the equipment that is not expressly described in this guide.**

- **To avoid the risk of injury, do not touch the interior of the camera if it has been dropped or otherwise damaged.**

- **Stop operating the camera immediately if it emits smoke, a strange smell, or otherwise behaves abnormally.**

- **Do not use organic solvents such as alcohol, benzine, or thinner to clean the equipment.**

- **Do not allow liquids or foreign objects to enter the camera.**
  This could result in fire or electrical shock.
  If liquid or foreign objects come into contact with the camera interior, immediately turn the camera power off and remove the batteries.

- **Use only recommended power sources.**
  Using other power sources could result in fire or electrical shock.

Battery

● **Use only recommended batteries.**

● **Do not place the batteries near or in direct flame.**

● **Do not let the batteries come into contact with water (e.g. sea water) or other liquids.**

● **Do not attempt to disassemble, alter or apply heat to the batteries.**

● **Avoid dropping or subjecting the batteries to severe impacts.**
This may cause explosions or leaks, resulting in fire, injury and damage to the surroundings. In the event that a battery leaks and the eyes, mouth, skin or clothing contacts these substances, immediately flush with water and seek medical assistance.

Other Warnings

● **Do not play the supplied CD-ROM(s) in any CD player that does not support data CD-ROMs.**
Playing the CD-ROM(s) in an audio CD player (music player) could damage the speakers. It is also possible to suffer hearing loss from listening with headphones to the loud sounds of a CD-ROM played on a music CD player.

⚠ Caution

● **Be careful not to bang the camera or subject it to strong impacts or shocks when hanging it by the strap.**

● **Be careful not to bump or push strongly on the lens.**
This could damage the camera or lead to injury.

● **Avoid using, placing or storing the camera in the following places.**
- Places subject to strong sunlight.
- Places subject to temperatures above 40 °C (104 °F).
- Humid or dusty areas.
These could cause leakage, overheating or an explosion of the batteries, resulting in electrical shock, fire, burns or other injuries. High temperatures may also cause deformation of the casing.

● **When using the flash, be careful not to cover it with your fingers or clothing.**
This could result in burns or damage to the flash.

Caution

● **Do not aim the camera at bright light sources (the sun, etc.).**
Doing so may cause malfunctions or damage the image sensor.

● **When using the camera on a beach or at a windy location, be careful not to allow dust or sand to enter the camera.**
This may cause the camera to malfunction.

● **In regular use, small amounts of smoke may be emitted from the flash.**
This is due to the high intensity of the flash burning dust and foreign materials stuck to the front of the unit. Please use a cotton swab to remove dirt, dust or other foreign matter from the flash to prevent heat build-up and damage to the unit.

● **Remove and store the batteries when you are not using the camera.**
If the batteries are left inside the camera, damage caused by leakage may occur.

● **Before you discard batteries, cover the terminals with tape or other insulators.**
Contacting other metal materials in waste containers may lead to fire or explosions.

● **Do not sit in a chair with the camera in your pocket.**
Doing so may cause malfunctions or damage the LCD monitor.

● **When putting the camera in your bag, ensure that hard objects do not come into contact with the LCD monitor.**

● **Do not attach accessories to the strap.**
Doing so may cause malfunctions or damage the LCD monitor.

1
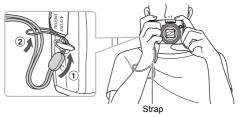
Getting Started

This chapter explains preparations before shooting, how to shoot in **AUTO** mode, and then how to view, erase and print the images you take. The latter part of this chapter explains how to shoot and view images in Easy Mode, how to shoot and view movies and how to transfer images to a computer.

Attaching the Strap/Holding the Camera

- Attach the included strap and place it around your wrist to avoid dropping the camera during use.
- Keep your arms tight against your body while holding the camera firmly by the sides. Be sure that your fingers do not block the flash while it is raised.

Strap

Inserting the Batteries and Memory Card

Insert the included batteries and memory card into the camera.

1 Check the card's write-protect tab.

● If the memory card has a write-protect tab, you will not be able to record images if the tab is in the locked position. Slide the tab up until you hear a click.
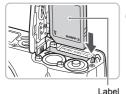
2 Open the cover.

● Slide and hold the cover lock ①, then slide and open the cover ② as shown.
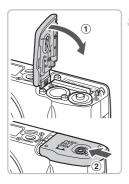
3 Insert the batteries.

● Insert the batteries with (+) and (-) ends oriented correctly.

4 Insert the memory card.

● Insert the memory card as shown until it locks into place with a click.
● Be sure the memory card is oriented correctly. Inserting the memory card in the wrong direction could damage the camera.

Label

5 **Close the cover.**

- Close the cover ① and press downward as you slide it until it clicks into place ②.

Removing the Memory Card

- Push the memory card in until you hear a click, then slowly release it.
▶ The memory card will pop up.

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Approximate Number of Shots That Can Be Taken

Power Source	Alkaline Batteries (Supplied)	NiMH Batteries (Sold Separately)
Number of Shots*	130	370
Playback Time (Hours)	7	9

* The number of shots that can be taken is based on the Camera & Imaging Products Association (CIPA) measurement standard.
• Under some shooting conditions, fewer shots can be taken.
• Depending on the brand of alkaline batteries used, the number of shots that can be taken may vary widely.
• The values for NiMH batteries are based on fully charged batteries.

Compatible Batteries

AA-size alkaline batteries and Canon AA-size NiMH batteries (sold separately) (pp. 38, 40).

Can any other batteries be used?

We cannot recommend the use of any other batteries than those listed above because performance varies widely.

Why use NiMH batteries?

NiMH batteries last much longer than alkaline batteries, especially in cold weather.

Battery Charge Indicator

When battery charge is low, an icon and message will appear. If the batteries are charged, the icon and message will not display.

Display	Summary
🔋	Battery charge is low. Prepare new batteries to continue using the camera.
"Change the batteries"	The batteries are depleted. Insert new batteries.

Approximate Number of Shots per Memory Card

Memory Card	2 GB	8 GB
Number of shots	749	2994

• Values are based on the default settings.
• The number of shots that can be taken will vary depending on camera settings, the subject and the memory card used.

❓ Can you check the number of shots that can be taken?

You can check the number of shots that can be taken when the camera is in a Shooting mode (p. 22).

Number of shots that can be taken

Compatible Memory Cards

● SD memory cards
● SDHC memory cards
● MultiMediaCards
● MMCplus memory cards
● HC MMCplus memory cards

❓ What is the write-protect tab?
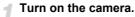
SD and SDHC memory cards have a write-protect tab. If this tab is in the locked position, [Card locked!] will appear on the screen and you will not be able to take or erase images.

Setting the Date and Time

The Date/Time settings screen will appear the first time the camera is turned on. Since the dates and times recorded into your images are based on these settings, be sure to set them.

Turn on the camera.
● Press the power button.
▶ The Date/Time screen will appear.

Date/Time

Set Date/Time.

09. 09. 2009 10:00 dd/mm/yy

SET OK   MENU Cancel

Set the date and time.
● Press the ◀▶ buttons to choose an option.
● Press the ▲▼ buttons or turn the ◯ dial to set a value.

Make the setting.
● Press the ⓕ button.
▶ Once the date and time have been set, the Date/Time screen will close.
● Pressing the power button will turn off the camera.

❓ Reappearing Date/Time screen

Set the correct date and time. If you have not set the date and time, the Date/Time screen will appear each time you turn on the camera.

Changing the Date and Time

You can change the current date and time settings.

Display the menus.
● Press the MENU button.

Choose [Date/Time] in the 🍴 tab.

🖸 🍴	
File Numbering	‹ Continuous ›
Create Folder	‹ Monthly ›
Lens Retract	‹ 1 min. ›
Power Saving_	
Date/Time_	09.09. '09 10:00
Distance Units	m/cm ft/in

● Press the ◀▶ buttons to choose the 🍴 tab.
● Press the ▲▼ buttons or turn the ◎ dial to choose [Date/Time], then press the ⓕⓤⓝⓒ button.

Change the date and time.
● Follow Steps 2 and 3 on p. 18 to adjust the setting.
● To close the menus, press the MENU button.
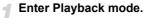
🔅 Date/Time battery

If the [Date/Time] screen appears even when the date/time have been correctly set, insert a new date/time battery (p. 124).

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Setting the Display Language
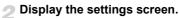
You can change the display language in the LCD monitor menus and messages.

Enter Playback mode.

● Press the ▶ button.

Display the settings screen.

● Press and hold the ⓕ button ①, then immediately press the MENU button ②.

English	Svenska	Türkçe
Deutsch	Español	繁體中文
Français	简体中文	한국어
Nederlands	Русский	ภาษาไทย
Dansk	Português	العربية
Suomi	Ελληνικά	Română
Italiano	Polski	فارسی
Norsk	Čeština	日本語
Українська	Magyar	

Set the display language.

● Press the ▲▼◀▶ buttons or turn the ◎ dial to choose a language, then press the ⓕ button.

▶ Once the display language has been set, the language menu will close.
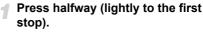
You can also change the display language by pressing the MENU button, choosing the tab, and choosing the [Language] menu item.

Pressing the Shutter Button

The shutter button has two stops. To take images that are in focus, be sure to first press the shutter button lightly (halfway) to focus, then take the shot.

Press halfway (lightly to the first stop).

▶ The camera automatically focuses and selects the necessary settings for shooting, such as the brightness.

▶ When the camera focuses, it will beep twice and the indicator will light green.

Press fully (to the second stop).

▶ The camera plays the shutter sound and takes the shot.

● Since the shot is being taken while the shutter sound plays, be careful not to move the camera.

? Does the length of the shutter sound change?
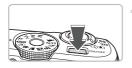
● Since the time required to shoot differs according to the scene you want to take, the length of the shutter sound may change.
● If the camera or subject moves while the shutter sound is playing, the recorded image may be blurry.

> If you just press the shutter button fully without pausing halfway, the image may not be in focus.

Taking Pictures

Since the camera can determine the subject and shooting conditions, you can let it automatically select the best settings for the scene and just shoot. The camera can also detect and focus on faces, setting the color and brightness to optimal levels.

Turn on the camera.
- Press the power button.
- ▶ The start-up sound will play, and the start-up screen will appear.
- Pressing the power button again will turn the camera off.

Choose **AUTO** mode.
- Set the mode dial to **AUTO**.
- When you point the camera toward the subject, the camera will make a slight noise as it determines the scene.
- ▶ The camera focuses on the subject it judges to be the main subject, and the icon for the determined scene appears in the upper right of the screen.
- ▶ When faces are detected, a white frame appears on the face of the main subject, while gray frames appear on other detected faces.
- ▶ Even if the detected faces move, the camera will follow the faces within a certain range.

Compose the shot.
- Moving the zoom lever toward [♦] will zoom in on your subject, making it appear larger. Moving the lever toward [♦♦♦] will zoom out from your subject, making it appear smaller.
- Keep your subject within the available focusing range that appears on the screen for a given zoom position.
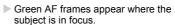
Focus range (approx.)
Zoom bar

Focus.
- Press the shutter button halfway to focus.
- ▶ When the camera focuses, it will beep twice and the indicator will light green.

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AF Frames

▶ Green AF frames appear where the subject is in focus.
▶ Several AF frames will appear when the camera focuses on more than one point.
● If the indicator lights orange and "Raise the flash" appears on the screen, it is recommended to shoot with the flash. Raise the flash manually, it will fire when you shoot. When you are not using the flash, lower it until it closes (the flash will turn off).

Shoot.

● Press the shutter button fully.
▶ The camera will play the shutter sound and shoot.
▶ The indicator will blink green while the image is recorded to the memory card.
▶ The image will appear on the screen for about two seconds.
● You can take a second picture even while an image is displayed by pressing the shutter button again.

What if...

● **the indicator blinks orange and ⚠ blinks on the screen?**
Attach the camera to a tripod so that the camera does not move and blur the image.
● **the camera does not play any sounds?**
Pressing the DISP. button while turning on the camera power will turn off all sounds except for warning sounds. To turn the sounds on, press the MENU button, choose the ⁰️⁷ tab, and then choose [Mute]. Press the ◀▶ buttons to choose [Off].

Taking Pictures

- **the image comes out dark even if the flash fired when shooting?**
  The subject is too far away for the flash to reach. Shoot within the effective flash range of approximately 50 cm – 4.0 m (1.6 – 13 ft.) at maximum wide angle, and approximately 1.0 – 2.5 m (3.3 – 8.2 ft.) at maximum telephoto.
- **the camera beeps once when the shutter button is pressed halfway?**
  Your subject is too close. When the camera is at maximum wide angle, move about 5 cm (2.0 in.) or more away from your subject and shoot. Move about 1.0 m (3.3 ft.) or more away when the camera is at maximum telephoto.
- **the lamp lights when the shutter button is pressed halfway?**
  To reduce red-eye and to assist in focusing, the lamp may light when shooting in dark areas.
- **the screen turns off when you try to take an image?**
  When flash recharging begins, the screen turns off. The screen turns on again when recharging ends.

Scene Icons

The camera displays an icon for the scene it has determined and then automatically focuses and selects the optimum settings for subject brightness and color.

Background / Subject	Bright	Backlit	Including Blue Skies	Backlit	Sunsets	Dark	When Using Tripod
People	(icon)	(icon)	(icon)	(icon)	–	(icon)	(icon)*
Subjects Other Than People/Landscapes	AUTO	(icon)	AUTO	(icon)	(icon)	AUTO	(icon)*
Close Subjects	(icon)	(icon)	(icon)	(icon)	–	(icon)	–
Icon Background Color	Gray		Light Blue		Orange	Dark Blue	

* Appears when the camera is attached to a tripod.

> Under certain conditions, the icon that appears may not match the actual scene. Especially when there is an orange or blue colored background (a wall for example), (icon) or the "Blue Skies" icons may appear and it may not be possible to shoot with the appropriate color. If this happens, try shooting in **P** mode (p. 66).

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Viewing Images

You can view your images on the screen.

Enter Playback mode.

● Press the ▶ button.

▶ The last image you took will appear.

Choose an image.

● Pressing the ◀ button will cycle through the images in reverse order.

● Pressing the ▶ button will cycle through the images in the order they were taken.

● The images change more quickly if you keep the ◀▶ buttons pressed, but they will appear coarse.

● Turning the ⌾ dial counter-clockwise displays images in reverse order, while turning it clockwise displays images in the order they were taken.

● If you press the shutter button halfway or turn the mode dial while in Playback mode, the camera will switch to Shooting mode.

● The lens will retract after approximately 1 minute elapses.

Erasing Images

You can choose and erase images one at a time. Please note that erased images cannot be recovered. Exercise adequate caution before erasing an image.

Enter Playback mode.

● Press the ▶ button.

▶ The last image you took will appear.

Choose an image to erase.

● Press the ◀▶ buttons or turn the ◎ dial to display an image to erase.

Erase the image.

● Press the ⌒ button.

▶ [Erase?] appears.

● Press the ◀▶ buttons or turn the ◎ dial to choose [Erase], then press the ⬛ button.

▶ The displayed image will be erased.

● To exit instead of erasing, press the ◀▶ buttons or turn the ◎ dial to choose [Cancel], then press the ⬛ button.

Erase?   Cancel   Erase

Printing Images
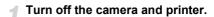
You can easily print the images you have taken if you connect the camera to a PictBridge compliant printer (sold separately).

Items to Prepare

● Camera and PictBridge compliant printer (sold separately)
● Interface cable supplied with the camera (p. 2)

1 Turn off the camera and printer.
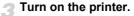
2 Connect the camera to the printer.

● Open the cover, and insert the small end of the plug firmly into the camera terminal in the direction shown.
● Insert the cable's larger plug into the printer. For connection details, refer to the user guide provided with the printer.

3 Turn on the printer.

4 Turn on the camera.

● Press the ▶ button to turn on the camera.
▶ ⁄ SET will appear on the screen.

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Choose an image to print.

● Press the ◀▶ buttons or turn the ○ dial to choose an image, then press the 🄼 button.

Print images.
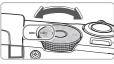
● Press the ▲▼ buttons to choose [Print] and press the 🄼 button.

▶ Printing will start.

● If you want to print additional images, repeat Steps 5 and 6 after printing has completed.

● After printing has completed, turn off the camera and printer, and unplug the interface cable.

● Refer to the *Personal Printing Guide* for details on printing.

● Refer to p. 39 for Canon-brand Pictbridge compliant printers.

Shooting in Easy mode

The explanations of camera operations and behavior below are basically the same as in "Taking Pictures" (p. 22) except that operational instructions appear on the screen, and the camera is set so that only the buttons explained on this page are functional. This prevents incorrect operation of the camera, allowing even beginners to take worry-free pictures.

Choose 🙂 mode.

● Set the mode dial to 🙂.

Shoot.

● Follow Steps 3 – 5 on pages 22 – 23 to shoot (no sound will play).
● If the indicator lights orange and "Raise the flash" appears on the screen, it is recommended to shoot with the flash. Raise the flash manually, it will fire when you shoot. When you are not using the flash, lower it until it closes (the flash will turn off).

Viewing or Erasing in Easy mode

The explanations for viewing or erasing unwanted images are basically the same as in "Viewing Images" (p. 25) and "Erasing Images" (p. 26) except that operational instructions appear on the screen, and the camera is set so that only the buttons explained on this page are functional. This prevents incorrect operation of the camera, allowing even beginners to view or erase images worry-free.

Viewing Single Images

Press the ▶ button.

▶ The last image you took will appear.

Choose an image.

● Press the ◀▶ buttons or turn the ◎ dial to switch between images.

Viewing Slideshows

Press the ▶ button.

Press the ⓕ button.

▶ All the shots you have taken will display for about 3 seconds each.

● Press the ⓕ button again to stop the slideshow.

Erasing Images

Press the ▶ button.

Choose an image to erase.

▶ Press the ◀▶ buttons or turn the ◎ dial to choose the image you want to erase.

Erase the image.

● After pressing the ⌃ button, press the ◀▶ buttons or turn the ◎ dial to choose [Erase]. Then press the ⓕ button.

▶ The chosen image will be erased.

Shooting Movies

The camera can automatically select all settings so that you can shoot movies just by pressing the shutter button.

Shooting Time

Choose ♯ mode.

● Set the mode dial to ♯.

Compose the shot.

● Moving the zoom lever toward [♦] will zoom in on your subject, making it appear larger. Moving the lever toward [♦♦♦] will zoom out from your subject, making it appear smaller.

Focus.
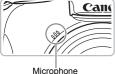
● Press the shutter button halfway to focus.
▶ When the camera focuses, it will beep twice and the indicator will light green.

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Elapsed Time

Microphone

Shoot.

● Press the shutter button fully.

▶ The camera will start shooting the movie, and [● Rec] and the elapsed time will appear on the screen.

● Once shooting begins, take your finger off the shutter button.

● If you change the composition of your shot during shooting, the focus, brightness and tone will automatically adjust.

● Do not touch the microphone while shooting.

● Do not press any buttons other than the shutter button. Otherwise, the sound the buttons make will be recorded in the movie.

Stop shooting.

● Press the shutter button fully again.

▶ The camera will beep once and stop shooting the movie.

▶ The indicator will blink green, and the movie will record to the memory card.

▶ Shooting will automatically stop when the memory card fills.

Estimated Shooting Times

Memory Card	2 GB	8 GB
Shooting Time	16 min. 47 sec.	1 hr. 7 min. 6 sec.

• Shooting times are based on default settings.
• Recording will automatically stop when either the clip file size reaches 4 GB or the recording time reaches approximately 1 hour.
• Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 4 or higher memory cards are recommended.

Viewing Movies

You can view your movies on the screen.

Enter Playback mode.

● Press the ▶ button.
▶ The last image you shot will appear.
▶ [SET] 🎥 appears on movies.

Choose a movie.

● Press the ◀▶ buttons or turn the ◎ dial to choose a movie, then press the ⬛ button.
▶ The movie control panel will appear on the screen.

Play the movie.

● Press the ◀▶ buttons or turn the ◎ dial to choose ▶ , then press the ⬛ button.
▶ The movie will play.
● You can pause/resume the movie by pressing the ⬛ button again.
● Press the ▲▼ buttons to adjust the volume.
▶ After the movie finishes, [SET] 🎥 appears.

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Transferring Images to a Computer

You can use the included software to transfer your camera images to a computer. If you are already using ZoomBrowser EX/ImageBrowser, install the software from the included CD-ROM, overwriting your current installation.

System Requirements

Windows

OS	Windows Vista (including Service Pack 1 and 2) Windows XP Service Pack 2, Service Pack 3
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	Pentium 1.3 GHz or higher
RAM	Windows Vista: 1 GB or more Windows XP: 512 MB or more
Interface	USB
Free Hard Disk Space	ZoomBrowser EX: 200 MB or more* PhotoStitch: 40 MB or more
Display	1,024 x 768 pixels or higher

* For Windows XP, Microsoft .NET Framework 3.0 or later (max. 500MB) must be installed. Installation may take some time depending on your computer's capabilities.

Macintosh
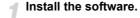
OS	Mac OS X (v10.4 – v10.5)
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	PowerPC G4/G5 or Intel Processor
RAM	512 MB or more
Interface	USB
Free Hard Disk Space	ImageBrowser: 300 MB or more PhotoStitch: 50 MB or more
Display	1,024 x 768 pixels or higher

Items to Prepare

- Camera and computer
- DIGITAL CAMERA Solution Disk supplied with the camera (p. 2)
- Interface cable supplied with the camera (p. 2)

Preparations
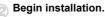
Windows Vista and Mac OS X (v10.5) are used for these explanations.

1 **Install the software.**

Windows
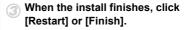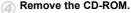
① **Place the DIGITAL CAMERA Solution Disk in the computer's CD-ROM drive.**

② **Begin installation.**
  ● Click [Easy Installation] and follow the onscreen instructions to proceed with the installation.
  ● If the [User Account Control] window appears, follow the on-screen instructions to proceed.

③ **When the install finishes, click [Restart] or [Finish].**

④ **Remove the CD-ROM.**
  ● Remove the CD-ROM when your desktop screen appears.

Macintosh

  ● Place the CD-ROM in the computer's CD-ROM drive and double-click the 🖴 icon.
  ● Click [Install], and follow the onscreen instructions to proceed with the installation.

2 **Connect the camera to the computer.**

  ● Turn off the camera.
  ● Follow the steps on p. 27 to connect the camera to a computer.

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3 Turn on the camera.

● Press the ▶ button to turn on the camera.

4 Open CameraWindow.

Windows

● Choose [Canon CameraWindow] and click [OK].
▶ CameraWindow will appear.
● If CameraWindow does not appear, click the [Start] menu and choose [All Programs], followed by [Canon Utilities], [CameraWindow], [CameraWindow] and [CameraWindow].

Macintosh

▶ CameraWindow will appear when you establish a connection between the camera and computer.
● If CameraWindow does not appear, click the CameraWindow icon on the Dock (the bar which appears at the bottom of the desktop).

Transfer Images
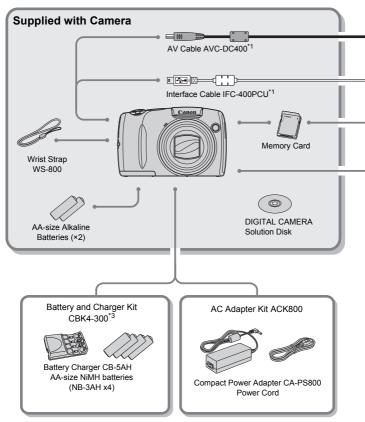
- Click [Import Images from Camera], and then click [Import Untransferred Images].
▶ All images not previously transferred will transfer to the computer. Transferred images will be sorted by date and saved in separate folders in the Pictures folder.
- After the transfer finishes, click [x] to close CameraWindow, then turn off the camera and unplug the cable.
- For further operations, refer to the *Software Guide*.
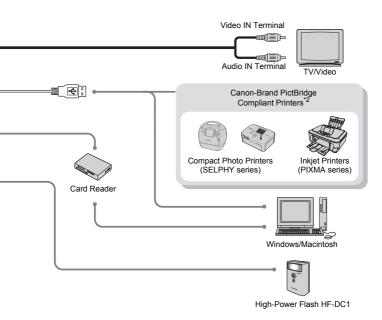
You can transfer images without installing the included software by simply connecting your camera to a computer. There are, however, the following limitations.
- After connecting to the camera, it may take a few minutes until you can transfer images.
- The camera information may not display correctly.
- Movies will not transfer correctly.
- Images shot in the vertical position may be transferred in the horizontal position.
- Protection settings for images may be lost when transferred to a computer.
- There may be problems transferring images or image information correctly depending on the version of the operating system in use, the file size, or the software in use.

Accessories

Supplied with Camera

AV Cable AVC-DC400[*1]

Interface Cable IFC-400PCU[*1]

Wrist Strap
WS-800

Memory Card

AA-size Alkaline
Batteries (×2)

DIGITAL CAMERA
Solution Disk

Battery and Charger Kit
CBK4-300[*3]

Battery Charger CB-5AH
AA-size NiMH batteries
(NB-3AH x4)

AC Adapter Kit ACK800

Compact Power Adapter CA-PS800
Power Cord

*1 Also available for purchase separately.
*2 See the user guide supplied with the printer for more information on the printer and interface cables.
*3 Battery and Charger Kit CBK4-200 may also be used.

Video IN Terminal

Audio IN Terminal

TV/Video

Canon-Brand PictBridge
Compliant Printers^{*2}

Compact Photo Printers
(SELPHY series)

Inkjet Printers
(PIXMA series)

Card Reader

Windows/Macintosh

High-Power Flash HF-DC1

Use of genuine Canon accessories is recommended.

This product is designed to achieve excellent performance when used with genuine
Canon accessories. Canon shall not be liable for any damage to this product and/or
accidents such as fire, etc., caused by the malfunction of non-genuine Canon
accessories (e.g., a leakage and/or explosion of a battery pack). Please note that this
warranty does not apply to repairs arising out of the malfunction of non-genuine Canon
accessories, although you may request such repairs on a chargeable basis.

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Separately Sold Accessories

The following camera accessories are sold separately.
Some accessories are not sold in some regions, or may no longer be available.

Power Supplies

- **Battery and Charger Kit CBK4-300**
  This kit includes both a dedicated charger unit and four rechargeable AA-size NiMH (nickel metal hydride) batteries. Recommended for powering the camera for an extended period of time.

- **AC Adapter Kit ACK800**
  This kit lets you power the camera using household power.
  Recommended for powering the camera for an extended period of time or when connecting to a computer or printer. Cannot be used to charge the batteries inside the camera.

The battery charger can also be used when abroad.

The charger can be used in regions that have 100 – 240 V (50/60 Hz) AC power. If the plug does not fit the outlet, use a commercially available plug adapter. Do not use devices such as electrical transformers for foreign travel because they will cause malfunctions.

Other Accessories
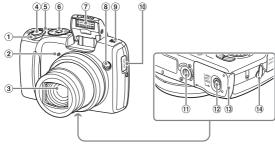
- **High-Power Flash HF-DC1**
  This attachable supplementary flash can illuminate subjects that are too distant for the light from the built-in flash to reach.

2

Learning More

This chapter explains the parts of the camera and what appears on the screen, as well as the basic operating instructions.

Components Guide

- ① Zoom Lever
  Shooting: [♦] (Telephoto) / [♦♦♦] (Wide Angle) (p. 22)
  Playback: Q (Magnify) / ◨◨ (Index) (pp. 100, 104)
- ② Microphone (p. 32)
- ③ Lens
- ④ Shutter Button (p. 21)
- ⑤ Power Button
- ⑥ Mode Dial

- ⑦ Flash (pp. 23, 29, 66, 86)
- ⑧ Lamp (Self-Timer Lamp (pp. 63, 64, 74, 75) / AF Assist Beam (p. 119) / Red-Eye Reduction Lamp (p. 120))
- ⑨ Speaker
- ⑩ Date Battery Holder (p. 124)
- ⑪ Tripod Socket
- ⑫ Cover Lock (p. 14)
- ⑬ Memory Card / Battery Cover (p. 14)
- ⑭ Strap Mount (p. 13)

Mode Dial

Use the mode dial to change the Shooting mode.

P, Tv, Av, M Mode

You can make settings such as the shutter speed and aperture value in order to take the picture you want (pp. 66, 87, 88, 89).

Movie Mode
For shooting movies (p. 31).

Auto Mode
You can leave it to the camera to select settings (p. 22).

Easy Mode
You can shoot just by pressing the shutter button (p. 29).
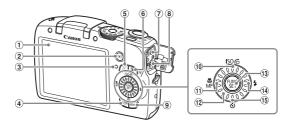
Scene Mode
The camera can automatically select all settings appropriate for the conditions so that you can take images just by pressing the shutter button (pp. 56 – 59).

If you turn the mode dial while in Playback mode, the camera will switch to Shooting mode.

ⓐ Screen (LCD Monitor) (p. 44)
ⓑ ▶ (Playback) Button (pp. 25, 30, 99)
ⓒ Indicator (p. 46)
ⓓ DISP. (Display) Button (pp. 44, 45)
ⓔ 🔲 (Face Selector) Button (p. 81)
ⓕ 🔆 (Exposure) (p. 67) / 🗑 (Single Image Erase) Button (p. 26)
ⓖ DC IN (Power Input) Terminal (p. 125)
ⓗ A/V OUT (Audio/Video Output) / DIGITAL Terminal (pp. 27, 35)
ⓘ MENU Button (p. 48)

ⓙ ISO Speed (p. 70) / 🔁 (Jump) (p. 101) / ▲ Button
ⓚ 🌷 (Macro) (p. 67) / MF (Manual Focus) (p. 83) / ◀ Button
ⓛ Control Dial (p. 43)
ⓜ 🔘 FUNC./SET (Function/Set) Button (p. 47)
ⓝ ⚡ (Flash) (pp. 66, 86) / ▶ Button
ⓞ ⏱ (Self-Timer) (pp. 63, 64, 74, 75) / ▼ Button

Control Dial

Turning the control dial allows you to perform operations such as choosing items or switching images.
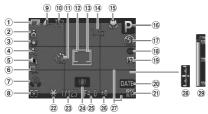
▶ Button

When the lens is extended, you can switch between the Shooting and Playback modes. When the lens is retracted, you can use this button to turn the camera on and off in Playback mode.

Information Displayed on the Screen

Shooting (Information Display)

① Battery Charge Indicator (p. 16)
② Camera Orientation*
③ White Balance (p. 71)
④ My Colors (p. 73)
⑤ i-Contrast (p. 90)
⑥ Drive Mode (p. 72)
⑦ Camera Shake Warning (p. 121)
⑧ Metering Modes (p. 82)
⑨ Compression (Image Quality) (p. 68) Recording Pixels (p. 68)
⑩ Still Images: Recordable shots (pp. 17, 69)
Movies: Remaining Time/Elapsed Time (pp. 32, 96)

⑪ Self-Timer (pp. 63, 64, 74, 75)
⑫ AF Frame (p. 23)
⑬ Spot AE Point Frame (p. 82)
⑭ Digital Zoom Magnification (p. 60) / Digital Tele-Converter (p. 61)
⑮ Macro (p. 67) / Manual Focus (p. 83)
⑯ Shooting Mode (p. 42)
⑰ Flash Mode (pp. 23, 29, 66, 86)
⑱ Red-Eye Correction (p. 91)

⑲ Flash Exposure Compensation / Flash Output (pp. 92, 93)
⑳ Date Stamp (p. 62)
㉑ ISO Speed (p. 70)
㉒ AE Lock (p. 84), FE Lock (p. 85)
㉓ Shutter Speed (pp. 87, 89)
㉔ Image Stabilizer (p. 121)
㉕ Aperture Value (pp. 88, 89)
㉖ Exposure Compensation (p. 67)
㉗ Disp. Overlay (p. 121)
㉘ Exposure Level Indicator (p. 89)
㉙ MF Indicator (p. 83)

* 🔆 : Standard, 🔆 🔆 : Held vertically

When shooting, the camera detects if it is held vertically or horizontally, and adjusts settings accordingly for the best shot. It also detects orientation during playback, so you can hold the camera in either orientation and it will automatically rotate images for correct viewing.

This function may not operate correctly when the camera is pointed straight up or down.
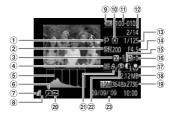
Switching the Display

You can change the display using the DISP. button.

Information Display   No Information Display

44

Playback (Detailed Information Display)

① Shooting Mode (p. 42)
② ISO Speed (p. 70)
③ Exposure Compensation (p. 67), Exposure Shift Amount (p. 97)
④ White Balance (p. 71)
⑤ Histogram (p. 46)
⑥ Image Editing (pp. 109 – 111)
⑦ Compression (Image Quality) (p. 68)
⑧ Recording Pixels (p. 68), AVI (Movies) (p. 96)
⑨ Battery Charge Indicator (p. 16)

⑩ Metering Modes (p. 82)
⑪ Folder Number – File Number (p. 116)
⑫ Displayed image number / Total number of images
⑬ Shutter Speed (pp. 87, 89)
⑭ Aperture Value (pp. 88, 89), Image Quality (Movies) (p. 96)
⑮ i-Contrast (pp. 90, 110)
⑯ Flash (pp. 66, 86), Flash Exposure Compensation (p. 92)

⑰ Macro (p. 67), Manual Focus (p. 83)
⑱ File Size (pp. 69, 96)
⑲ Still Images: Recording Pixels (p. 69) Movies: Movie Length (p. 96)
⑳ Protect (p. 106)
㉑ My Colors (p. 73)
㉒ Red-Eye Correction (pp. 91, 111)
㉓ Shooting Date and Time (p. 62)

Switching the Display

You can change the display using the DISP. button.

No Information Display → Simple Information Display → Detailed Information Display → Focus Check Display (p. 103)

You can also switch the display by pressing the DISP. button while the image displays shortly after shooting. However, Simple Information will not display. You can set the display that appears first. Press the MENU button to choose the ◻ tab. Then set [Review Info].

45
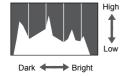
Display in Dark Conditions during Shooting

The display automatically brightens when shooting in dark conditions, allowing you to check the composition (Night Display function). However, the brightness of the image on the screen, and the brightness of the actual image recorded may be different. Screen noise may appear and the movement of the subject may appear somewhat jagged on the screen. This has no effect on the recorded image.

Overexposure Warning during Playback

In "Detailed Information Display" (p. 45), overexposed areas of the image flash on the screen.

Histogram during Playback

High

Low

Dark ⟵⟶ Bright

● The graph that appears in "Detailed Information Display" (p. 45) is called the histogram. The histogram shows the distribution and amount of brightness of an image. When the graph approaches the right side, the image is bright, but when it approaches the left side, the image is dark, and in this way you can judge the exposure.

Indicator

The Indicator on the back of the camera (p. 43) will light or blink under the following conditions.

Colors	Status	Operation Status
Green	Lights	Shooting preparation complete (p. 22)/Display Off (p. 118)
	Blinks	Recording/reading/transmitting image data (p. 23)
Orange	Lights	Shooting preparation complete (flash on) (p. 23)
	Blinks	Camera shake warning (p. 23)

When the indicator blinks green, data is being recorded to/read from the memory card or various information is being transmitted. Do not turn off the power, open the memory card slot/battery cover, shake or jolt the camera. These actions may corrupt the image data or cause the camera or memory card to malfunction.

FUNC. Menu – Basic Operations

Commonly used shooting functions can be set with the FUNC. menu. The menu items and options differ depending on the mode (pp. 132 – 135).

Choose a shooting mode.
● Set the mode dial to the desired shooting mode.

Display the FUNC. menu.
● Press the (FUNC) button.
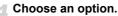
Choose a menu item.
● Press the ▲▼ buttons to choose a menu item.
▶ The available options for the menu item appear in the lower part of the screen.

Available Options

Menu Items

Choose an option.
● Press the ◀▶ buttons or turn the ◎ dial to choose an option.
● You can also choose settings by pressing the DISP. button on options that display DISP..

Make the setting.
● Press the (FUNC) button.
▶ The shooting screen will reappear and the setting you chose will display on the screen.

MENU – Basic Operations

Various functions can be set from the menus. The menu items are organized under tabs, such as for shooting (□) and playback (▶). The available menu items differ depending on the mode (pp. 134 – 137).

Display the menu.

● Press the MENU button.

Choose a tab.

● Press the ◀▶ buttons, or move the zoom lever (p. 42) left or right to choose a tab.

Choose a menu item.

● Press the ▲▼ buttons or turn the ◎ dial to choose a menu item.

● Some items require you to press the ⓕ button or ▶ button to display a submenu in which you change the setting.

Choose an option.

● Press the ◀▶ buttons to choose an option.

Make the setting.

● Press the MENU button.

▶ The normal screen will reappear.

48
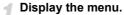
Changing the Sound Settings

You can silence or adjust the volume of camera sounds.

Muting Sounds

Display the menu.
- Press the MENU button.

Choose [Mute].
- Press the ◀▶ buttons to choose the 🏠 tab.
- Press the ▲▼ buttons or turn the ◯ dial to choose [Mute], then press the ◀▶ buttons to choose [On].

Adjusting the Volume

Display the menu.
- Press the MENU button.

Choose [Volume].
- Press the ◀▶ buttons to choose the 🏠 tab.
- Press the ▲▼ buttons or turn the ◯ dial to choose [Volume], then press the ⒡ button.

Change the volume.
- Press the ▲▼ buttons or turn the ◯ dial to choose an item, then press the ◀▶ buttons to adjust the volume.

Changing the Screen Brightness

◯	↑↑	
Mute		Off
Volume...		
LCD Brightness	− ─┼─ +	
Start-up Image	On	
Format...	☐ 1.8GB	
File Numbering	‹ Continuous ›	

1 **Display the menu.**
- Press the MENU button.

2 **Choose [LCD Brightness].**
- Press the ◀▶ buttons to choose the ↑↑ tab.
- Press the ▲▼ buttons or turn the ◯ dial to choose [LCD Brightness].

3 **Change the brightness.**
- Press the ◀▶ buttons to change the brightness.
- Press the MENU button again to complete the setting.

Returning the Camera to Default Settings
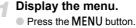
When you have mistakenly changed a setting, you can reset the camera to the default settings.

Power Saving	
Date/Time	09.09.'09 10:00
Distance Units	m/cm ft/in
Video System	NTSC PAL
Language	English
Reset All	

1 **Display the menu.**
   ● Press the **MENU** button.
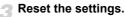
2 **Choose [Reset All].**
   ● Press the ◀▶ buttons to choose the ⑂ tab.
   ● Press the ▲▼ buttons or turn the ◯ dial to choose [Reset All], then press the ⏺ button.

Reset All	
Reset settings to default?	
Cancel	OK

3 **Reset the settings.**
   ● Press the ◀▶ buttons or turn the ◯ dial to choose [OK], then press the ⏺ button.
   ▶ The camera will reset to the default settings.

❓ Are there functions that cannot be reset?

● The [Date/Time] (p. 18) in the ⑂ tab, [Language] (p. 20), [Video System] (p. 105).
● The saved data for custom white balance (p. 71).

Formatting Memory Cards

Before you use a new memory card or one that has been used in other devices, you should format the card with this camera. Formatting (initializing) a memory card erases all data on the memory card. As you cannot retrieve the erased data, exercise adequate caution before formatting the memory card.

Display the menu.
● Press the **MENU** button.

Choose [Format].
● Press the ◀▶ buttons to choose the 𝔜𝔱 tab.
● Press the ▲▼ buttons or turn the ⚪ dial to choose [Format], then press the 🔘 button.

Format the memory card.
● Press the ◀▶ buttons or turn the ⚪ dial to choose [OK], then press the 🔘 button.
▶ The memory card will be formatted.
▶ When formatting has finished, the menu screen will reappear.

Low Level Format

Perform low level formatting when you think that the recording/reading speed of a memory card has dropped.

Format

Format memory card?
1.8GB
921MB used

✓ ► Low Level Format

Cancel   OK

● Follow Steps 1 – 2 to display the [Format] screen.
● Press the ▲▼ buttons or turn the ◎ dial to choose [Low Level Format], then press the ◀▶ buttons to display ✓.
● Press the ▲▼◀▶ buttons or turn the ◎ dial to choose [OK], then press the ⬛ button.
▶ Low level formatting starts.

❓ About formatting

● The supplied memory card has already been formatted.
● When the [Memory card error] message appears, or when the camera does not work correctly, formatting the memory card may solve the problem. Copy the images from the memory card to a computer or other device before formatting.

> ⚠ Formatting or erasing data on a memory card merely changes the file management information on the card and does not ensure its contents are completely erased. Be careful when transferring or disposing of a memory card. When disposing of a memory card, take precautions such as physically destroying the card to prevent personal information leaks.

> ✎ ● The total capacity of the memory card displayed in the formatting screen may be less than indicated on the memory card.
> ● Low level formatting may take longer than standard formatting, since all recorded data are erased.
> ● You can stop a low level format of a memory card by choosing [Stop]. When stopping low level formatting, the data will be erased but the memory card can be used without problem.

Power Saving Function (Auto Power Down)

To save battery power, the camera shuts down automatically when it is not operated for a certain time.

Power Saving during Shooting

The monitor will turn off approximately 1 minute after the camera is last operated. After about 2 more minutes, the lens will retract and the power will turn off. When the monitor has turned off but the lens has not yet retracted, pressing the shutter button halfway (p. 21) turns on the monitor and shooting can continue.

Power Saving during Playback

The power will turn off approximately 5 minutes after the camera is last operated.

- You can turn off the Power Saving Function (p. 117).
- You can adjust the time before the monitor turns off (p. 118).

3

Shooting in Special Conditions and Commonly Used Functions

This chapter explains how to shoot in different conditions, as well as how to use common functions, such as the flash and self-timer.

- When you choose a Shooting mode that matches a particular set of conditions, the camera will automatically select any necessary settings. All you need do is press the shutter button to take an optimized picture.
- This chapter assumes the mode dial is set to **AUTO** for "Zooming in More Closely on Subjects (Digital Zoom)" (p. 60) to "Using the Face Self-Timer" (p. 64). When shooting in a scene mode, check which functions are available in that mode (pp. 132 – 135).

Shooting in Various Conditions

The camera will select the necessary settings for the conditions in which you wish to shoot when you choose the matching mode.

1 Choose the Shooting mode.
● Set the mode dial to the desired Shooting mode.

2 Shoot.
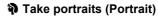
❀ Take portraits (Portrait)
● Produces a soft effect when photographing people.

▲ Take landscapes (Landscape)
● Lets you shoot majestic landscapes.

⊠ Take snapshots at night (Night Snapshot)
● Lets you take beautiful snapshots of people against city nightscapes or night backgrounds.
● If you hold the camera firmly, you can take pictures with reduced camera shake, even without a tripod.

❧ Take shots of kids and pets (Kids&Pets)
● Lets you capture subjects that move around, such as children and pets, without missing photo opportunities.

㮰 **Take indoor shots (Indoor)**

● Lets you shoot indoors with natural colors.

> In 🏞, 🏃 or 㮰 mode, images may appear coarse because the ISO speed (p. 70) is increased to match the shooting conditions.

Shooting in Special Scenes

The camera will select the necessary settings for the conditions in which you wish to shoot when you choose the matching mode.

1 **Choose a Shooting mode.**
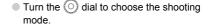
● Set the mode dial to **SCN**.

● Turn the ⊙ dial to choose the shooting mode.

2 **Shoot.**

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☀ Shoot sunsets (Sunset)

● Lets you take shots of sunsets in vivid colors.

☾ Take nightscapes (Night Scene)

● Lets you take beautifully lit city nightscapes or night backgrounds.
● You can also take beautifully lit pictures of people along with the backgrounds due to the slower shutter speed.

※ Take shots of fireworks (Fireworks)

● Lets you take shots of fireworks in vivid colors.

☼ Take shots of people at the beach (Beach)

● Lets you take bright shots of people on sandy beaches where the reflected sunlight is strong.

⬡ Take shots of aquatic life in an aquarium (Aquarium)

● Lets you take natural-colored shots of aquatic life in indoor aquariums.

✻ Take shots of foliage (Foliage)

● Lets you shoot trees and leaves, such as new growth, autumn leaves or blossoms, in vivid colors.

⛄ Take shots of people in snow (Snow)

● Lets you take bright, natural-colored shots of people against snowy backgrounds.

🈯 Shoot using high ISO speed (ISO 3200)

● Lets you set the ISO speed to 3200, and lets you shoot without camera shake or subject blurring even in low light conditions.
● Recording pixels are set to M3 (1600 x 1200 pixels) (p. 68).
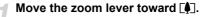
● In ⛄ mode, make sure the subject does not move until the shutter sound plays, even after the flash fires.
● In ⛄ or ▒ mode, attach the camera to a tripod to prevent the camera from moving and blurring the image. Additionally, you are recommended to set [IS Mode] to [Off] (p. 121).
● In ◐ mode, images may appear coarse because the ISO speed (p. 70) is increased to match the shooting conditions.
● In 🈯 mode, images may appear coarse.

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Zooming in More Closely on Subjects (Digital Zoom)

You can use the digital zoom to zoom up to a maximum of 40x and capture subjects that are too far away for the optical zoom (p. 22) to enlarge. The images may appear coarse, however, depending on the recording pixel setting (p. 68) and the zoom factor used.

Move the zoom lever toward [♦].

● Hold the lever until zooming stops.

▶ The zoom will stop when the largest possible zoom factor without image deterioration has been reached, and the zoom factor will appear.

Move it toward [♦] again.

▶ The digital zoom will zoom in even further on the subject.

Zoom Factors at which Images Deteriorate

Recording Pixels	Optical Zoom (36 – 360 mm)*	Digital Zoom (360 – 1440 mm)*		
L	10x →			
M1	10x →			
M2		14x →		
M3			23x →	
S				40x →

☐ ▨ : No image deterioration (zoom factor appears white)

▨ : Image deterioration (zoom factor appears blue)

→ : Maximum zoom factor without deterioration (Safety Zoom)

* Focal length (35mm equivalent)

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ⓖ **Turning off the digital zoom**

To turn off the digital zoom, press the MENU button, choose the ⚫ tab, and choose [Digital Zoom] and the [Off] option.

Digital Tele-Converter

The focal length of the lens can be increased by an equivalent of 1.4x or 2.3x. This enables a faster shutter speed and less chance of camera shake than the zoom (including digital zoom) used by itself at the same zoom factor.

The images may appear coarse, however, depending on the combination of recording pixel (p. 68) and digital tele-converter settings used.

⚫	YT	
Digital Zoom	◄ 1.4x	►
AF-Point Zoom		Off
AF-assist Beam	On	
Flash Settings...		
Review	◄ 2 sec.	►
Review Info	◄ Off	►

Choose [Digital Zoom].

● Press the MENU button and choose the ⚫ tab, then choose [Digital Zoom].

Accept the setting.

● Press the ◄► buttons to choose [1.4x] or [2.3x].
● Pressing the MENU button will restore the shooting screen.
▶ The view will be enlarged and the zoom factor will appear on the screen.
● To return to standard digital zoom, choose [Digital Zoom] and the [Standard] option.

Combinations that Cause Image Deterioration

● Using [1.4x] at a recording pixel setting of L or M1 will cause image deterioration (the zoom factor will display in blue).
● Using [2.3x] at a recording pixel setting of L, M1 or M2 will cause image deterioration (the zoom factor will display in blue).

> ● The respective focal lengths when using [1.4x] and [2.3x] are 50.4 – 504 mm and 82.8 – 828 mm (35mm film equivalent).
> ● The digital tele-converter cannot be used together with the digital zoom.

Inserting the Date and Time

You can insert the shooting date and time in the lower right corner of an image. Once inserted, however, they cannot be deleted. Be sure to check beforehand that the date and time are correctly set (p. 18).

▢	▓▓
AF-assist Beam	On
Flash Settings...	
Review	◄ 2 sec. ►
Review Info	◄ Off ►
Disp. Overlay	◄ Off ►
Date Stamp	◄ Date ►

1 Choose [Date Stamp].

● Press the MENU button.
● Press the ◀▶ buttons to choose the ▢ tab.
● Press the ▲▼ buttons or turn the ◎ dial to choose [Date Stamp].

2 Accept the setting.

● Press the ◀▶ buttons to choose [Date] or [Date & Time].
● Pressing the MENU button will restore the shooting screen.
▶ [DATE] will appear on the screen.

3 Shoot.

▶ The shooting date and time will be recorded in the image's lower right corner.
● To restore to the original setting, choose [Off] in Step 1.

09/09/2009

💡 **Inserting and printing the date and time in images without an embedded date and time**
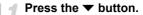
● **Use the DPOF print settings (p. 112) to print.**
● **Use the included software to print.**
  Refer to the *Software Guide* for details.
● **Connect the camera to a printer to print.**
  Refer to the *Personal Printing Guide* for details.

Using the Self-Timer

The self-timer can be used to shoot a group photo that includes the camera operator. The camera will activate approximately 10 seconds after the shutter button is pressed.
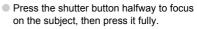
Press the ▼ button.

Choose ⓨ.

- Press the ▲▼ buttons or turn the ◯ dial to choose ⓨ, then press the ⓕ button.
- Once set, ⓨ will appear.

10 sec. Self-Timer

Shoot.

- Press the shutter button halfway to focus on the subject, then press it fully.
- When the self-timer starts, the lamp blinks and the self-timer sound plays.
- Two seconds before the shutter releases, the lamp and sound speed up (the lamp remains lit when the flash will fire).
- To cancel shooting with the self-timer after countdown has started, press the ▼ button.
- To restore the original setting, choose ⓨ in Step 2.

You can change the delay time and number of shots (p. 75).
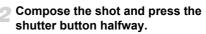
Using the Face Self-Timer

Once you compose the shot, such as for a group photo, press the shutter button, and enter the composition, the camera will take three shots in a row two seconds after it detects your face (p. 78).

1 Choose ⊙.
● Follow Step 2 on p. 63 and choose ⊙.

2 Compose the shot and press the shutter button halfway.
● Make sure a green frame appears on the face focused on and white frames appear on other faces.

3 Press the shutter button fully.
▶ The camera will enter shooting stand-by, and [Look straight at camera to start count down] will appear on the screen.
▶ The lamp will blink and the self-timer sound will play.

4 Join the subjects and look at the camera.
▶ When the camera detects a new face, the lamp and sound will speed up (the lamp remains lit when the flash will fire), and two seconds later the shutter will release.
▶ The second and third shots will continue in succession.
● To restore the original setting, choose ⊙ in Step 2 on p. 63.

❓ What if a face is not detected?

Even if your face is not detected after joining the subjects, the shutter will release approximately 30 seconds later.

💡 Changing the number of shots

For the screen in Step 1, press the MENU button, then press the ◀▶ buttons or turn the ◎ dial to change the number of shots. Press the ⊛ button to accept the setting.

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4

Choosing Settings Yourself

In this chapter you will learn how to use the various functions in **P** mode to progressively advance your shooting skills.

- This chapter assumes that the mode dial is set to **P**.
- **P** stands for Program AE.
- Before attempting to shoot using a function explained in this chapter in modes other than **P** mode, check if the function is available in those modes (pp. 132 – 135).

Shooting in Program AE

You can choose the settings for various functions to suit your preferences.
AE stands for Auto Exposure.

1 **Set the mode dial to P.**

2 **Adjust the settings according to your purposes (pp. 66 – 75).**

3 **Shoot.**

❓ What if the shutter speed and aperture value are displayed in orange?

If a correct exposure cannot be obtained when pressing the shutter button halfway, the shutter speed and aperture value are shown in orange. Try the following settings to obtain the correct exposure.

● Turn on the flash (p. 66)
● Choose a higher ISO speed (p. 70)

Turning the Flash On

You can make the flash fire every time you shoot. At maximum wide angle, the flash range is approximately 50 cm – 4.0 m (1.6 – 13 ft.), and at maximum telephoto, it is 1.0 – 2.5 m (3.3 – 8.2 ft.)

1 **Raise the flash.**

2 **Choose ϟ.**

● After pressing the ▶ button, press the ◀▶ buttons or turn the ◎ dial to choose ϟ, then press the ∰ button.

▶ Once set, ϟ will appear.

Adjusting the Brightness (Exposure Compensation)

You can adjust the standard exposure set by the camera in 1/3-stop increments in the range of –2 to +2.

1 Choose the exposure compensation.
● Press the ☒ button.

2 Adjust the brightness.
● While watching the screen, turn the ◎ dial to adjust the brightness and press the ☒ button.

Shooting Close-ups (Macro)

You can shoot an object at a close distance or even shoot extreme close-ups of it. The shooting range is approximately 1 – 50 cm (0.4 in. – 1.6 ft.) from the end of the lens (when the zoom lever is pushed to the maximum ▐▐▐).

Choose ♣.
● After pressing the ◀ button, press the ◀▶ buttons or turn the ◎ dial to choose ♣, then press the ⓕ button.
▶ Once set, ♣ will appear.

❓ About the Zoom Bar
• When you move the zoom lever, the zoom bar appears on the screen. When shooting in Macro mode, the camera cannot focus in the range of the yellow bar.
• When zooming within the range of the yellow bar, ♣ will be grayed out and shooting will be done in ▲.

💡 How can I take better close-ups?
• You are recommended to attach the camera to a tripod and shoot in ⊙, to prevent the camera from moving and blurring the image (p. 74).
• You can reduce the AF frame size when you want to focus on a specific portion of the subject (p. 78).

> ⚠ The edges of the image may darken if the flash fires.

Changing the Recording Pixels (Image Size)

You can choose from six recording pixels (image size) settings.

Choose the recording pixels.

● After pressing the ⊛ button, press the ▲▼ buttons to choose ⌊ .

Choose an option.

● Press the ◀▶ buttons or turn the ◯ dial to choose an option, then press the ⊛ button.

▶ The setting you chose will display on the screen.

If you choose Ⓦ, you cannot use Digital Zoom (p. 60) or Digital Tele-Converter (p. 61).

Changing the Compression Ratio (Image Quality)

You can choose from the following two levels of compression ratio (image quality): ◢ (Fine), ◣ (Normal).

Choose the compression ratio.

● After pressing the ⊛ button, press the ▲▼ buttons to choose ◢ .
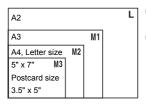
Choose an option.

● Press the ◀▶ buttons or turn the ◯ dial to choose an option, then press the ⊛ button.

▶ The setting you chose will display on the screen.

Approximate Values for Recording Pixels and Compression Ratio

Recording Pixels	Compression Ratio	Single Image Data Size (Approx. KB)	Number of Recordable Images	
			2 GB	**8 GB**
L (Large) 10 M/3648 x 2736	◢	2565	749	2994
	◢	1226	1536	6140
M1 (Medium 1) 6 M/2816 x 2112	◢	1620	1181	4723
	◢	780	2363	9446
M2 (Medium 2) 4 M/2272 x 1704	◢	1116	1707	6822
	◢	556	3235	12927
M3 (Medium 3) 2 M/1600 x 1200	◢	558	3235	12927
	◢	278	6146	24562
S (Small) 0.3 M/640 x 480	◢	150	10245	40937
	◢	84	15368	61406
W (Widescreen) 3648 x 2048	◢	1920	1007	4026
	◢	918	2048	8187

• The values in the table are measured according to Canon standards and may change depending on the subject, memory card and camera settings.

Approximate Values for Paper Size

A2			L
A3		M1	
A4, Letter size	M2		
5" x 7"	M3		
Postcard size			
3.5" x 5"			

● S Suitable for sending images as e-mail attachments.
● W For printing on wide size paper.

Changing the ISO Speed

Choose the ISO speed.

● After pressing the ▲ button, press the ▲▼ buttons or turn the ◯ dial to choose an option, then press the ⓕ button.

$\frac{ISO}{AUTO}$	Automatically adjusts the ISO speed to the Shooting mode and shooting conditions.		
$\frac{ISO}{80}$ $\frac{ISO}{100}$ $\frac{ISO}{200}$	Low	Fine weather conditions, outdoor shooting.	
$\frac{ISO}{400}$ $\frac{ISO}{800}$		Cloudy, Twilight	
$\frac{ISO}{1600}$	High	Nightscapes, Dark interiors	

ⓖ Changing the ISO speed

- Lowering the ISO speed results in sharper images, but there may be an increased chance of image blurring in certain shooting conditions.
- Raising the ISO speed results in a faster shutter speed, reducing camera shake and letting the flash reach greater distances to the subject. The images, however, will appear coarse.

- When the camera is set to $\frac{ISO}{AUTO}$, you can press the shutter button halfway to display the automatically set ISO speed.
- With ISO 3200 you can set an even faster speed (p. 59).

Adjusting the White Balance

The white balance (WB) function sets the optimal white balance for natural looking colors.

Choose the white balance.

● After pressing the (FUNC) button, press the ▲▼ buttons to choose AWB.

Choose an option.

● Press the ◀▶ buttons or turn the ◯ dial to choose an option, then press the (FUNC) button.

▶ The setting you chose will display on the screen.

AWB	Auto	Automatically sets the optimal white balance for the shooting conditions.
☀	Day Light	Fine weather conditions, outdoor shooting
☁	Cloudy	Cloudy, shady, twilight conditions
🔆	Tungsten	Tungsten, bulb-type (3-wavelength) fluorescent lighting
🗏	Fluorescent	Warm-white fluorescent, cool-white fluorescent, warm-white-type (3-wavelength) fluorescent lighting
🗏	Fluorescent H	Daylight fluorescent, daylight-type (3-wavelength) fluorescent lighting
🖳	Custom	Manually sets a custom white balance.

🖳 Custom White Balance

You can adjust the white balance to the light source at the shooting location. Make sure that you set the white balance under the light source of the actual scene you will shoot.

● In Step 2 above, choose 🖳.

● Make sure the entire screen is filled with a white colored subject, then press the DISP. button.

▶ The tint on the screen will change when a white balance data is set.

If you change camera settings after recording white balance data, the tone may not turn out properly.

Continuous Shooting

You can shoot continuously at a fixed interval.

Choose a Drive mode.

● After pressing the ⬛ button, press the ▲▼ buttons to choose □.

Choose an option.

● Press the ◀▶ buttons or turn the ◎ dial to choose ⬛ or ⬛, then press the ⬛ button.

Shoot.

▶ As long as you hold the shutter button down, the camera will shoot successive images.

Drive Mode	Shooting Interval	Description
⬛ Continuous	Approx. 1.3 images/sec.	For continuous shooting, the focus and exposure are locked when the shutter button is pressed halfway.
⬛ Continuous Shooting AF	Approx. 0.9 images/sec.	The camera shoots continuously and focuses. The [AF Frame] is set to [Center].
⬛ Continuous Shooting LV	Approx. 0.9 images/sec.	The camera shoots continuously with the focus locked to the position set in the first shot.

● Cannot be used with the self-timer (pp. 63, 64, 74, 75).
● As the number of images increases, the shooting intervals may take longer.
● If the flash fires, shooting intervals may take longer.
● When in ⬛ mode, ⬛ will change to ⬛ when shooting in manual focus (p. 83).

Changing the Tone of an Image (My Colors)

You can change the tone of an image to sepia or black and white when shooting.

Choose My Colors.

● After pressing the ⬜ button, press the ▲▼ buttons to choose ⒜FF .

Choose an option.

● Press the ◀▶ buttons or turn the ⬭ dial to choose an option, then press the ⬜ button.

▶ The setting you choose will display on the screen.

⒜FF	My Colors Off	—
⒜V	Vivid	Emphasizes the contrast and color saturation for a vivid impression.
⒜N	Neutral	Tones down the contrast and color saturation for neutral hues.
⒜Se	Sepia	Sepia tones.
⒜BW	B/W	Black and white.
⒜C	Custom Color	You can adjust contrast, sharpness, and color saturation etc. to your preference (p. 74).

✎ The white balance cannot be set in the ⒜Se and ⒜BW modes (p. 71).

A_C Custom Color

The contrast, sharpness and color saturation in an image can be chosen and set from 5 different levels.

● Follow Step 2 on p. 73 to choose A_C , then press the DISP. button.
● Press the ▲▼ buttons to choose an option, then press the ◀▶ buttons or turn the ○ dial to choose a value.
● The more to the right, the stronger/deeper the effect gets, the more to the left, the weaker/lighter the effect gets.
● Press the DISP. button to accept the setting.

Shooting Using the Two Second Self-Timer

You can set the self-timer to a delay of approximately two seconds.

Choose ☼.

● After pressing the ▼ button, press the ▲▼ buttons or turn the ○ dial to choose ☼, then press the ⓕ button.
▶ Once set, ☼ will appear on the screen.
● Follow Step 3 on p. 63 to shoot.

Customizing the Self-Timer

You can set the time delay (0 – 30 seconds) and the number of shots (1 – 10 shots).

Choose ⌒⌒.

● After pressing the ▼ button, press the ▲▼ buttons or turn the ◎ dial to choose ⌒⌒, then press the MENU button.

Choose the settings.

● Press the ▲▼ buttons to choose [Delay] or [Shots].
● Press the ◀▶ buttons or turn the ◎ dial to choose a value, then press the ⌢ button.
● Follow Step 3 on p. 63 to shoot.

❓ What if the number of shots is set to two or more shots?

● Exposure and white balance settings are set with the first shot.
● When you set the time delay for more than 2 seconds, the self-timer lamp and sound speed up 2 seconds before the shutter releases (when the flash will fire, the lamp lights).

● If the flash fires, the shooting interval may be longer.
● If you set a high number of shots, the shooting interval may be longer.
● If the memory card becomes full, shooting stops automatically.

Shooting Using a TV Monitor

You can use a TV to display the camera screen content while shooting.

- Connect the camera to a TV as described in "Viewing Images on a TV" (p. 105).
- Shooting procedures are the same as when using the camera's monitor.

Changing the Composition with the Focus Lock

While you keep the shutter button pressed halfway, the focus and exposure are locked. You can now recompose and shoot. This is called Focus Lock.

1 Focus.
- Center the subject you want in focus, and press the shutter button halfway.
- Confirm that the AF Frame is green.

2 Recompose.
- Keep the shutter button pressed halfway and recompose the scene.

3 Shoot.
- Press the shutter button fully.

5

Getting More Out of Your Camera

This chapter serves as the advanced version of Chapter 4 and explains how to take pictures using various functions.

- This chapter assumes that the mode dial is set to **P**.
- The sections "Setting the Shutter Speed" (p. 87), "Setting the Aperture Value" (p. 88), "Setting the Shutter Speed and Aperture Value" (p. 89), assume that the mode dial is set to these modes.
- The section "Adjusting the Flash Output" (p. 93) assumes that the mode dial is set to **M**.
- Before attempting to shoot using a function explained in this chapter in modes other than **P** mode, check if the function is available in those modes (pp. 132 – 135).

Changing the AF Frame Mode

You can change the AF (Auto Focus) frame mode to match the conditions you want to shoot.

Choose [AF Frame].

● Press the MENU button, choose the ◻ tab, and then choose the [AF Frame] menu item. Press the ◀▶ buttons to choose an option.

Face Detect

- Detects people's faces and sets the focus, exposure (evaluative metering only) and white balance (▥ᗺ only).
- When the camera is pointed at subjects, a white frame appears on the face the camera judges to be the main subject, and gray frames (max. 2) will appear on other faces. When the shutter button is pressed halfway, up to 9 green frames will appear on faces on which the camera focuses.

> ● If a face is not detected and only gray frames (no white frame) appear, AF Frame will be set to [Center].
> ● Examples of faces that cannot be detected:
>   • Subjects that are far away or extremely close.
>   • Subjects that are dark or light.
>   • Faces turned to the side or at a diagonal, or faces with a portion hidden.
> ● The camera may mistakenly identify non-human subjects as a face.
> ● If the camera cannot focus when you press the shutter button halfway, the AF frame will not appear.

Center

The AF frame is locked to the center. This is effective for focusing on a specific point.

☼ You can reduce the AF frame size

- Press the MENU button, choose the ◻ tab, then choose the [AF Frame Size] menu item and [Small] option.
- The setting is configured to [Normal] when the Digital Zoom (p. 60) or Digital Tele-converter (p. 61) is used.

> If the camera cannot focus when you press the shutter button halfway, the AF frame will turn yellow and ● will appear.

Magnifying the Focal Point

If you press the shutter button halfway, the AF frame will magnify and you can check the focus.

Choose [AF-Point Zoom].

● Press the **MENU** button, choose the ◯ tab, and then choose the [AF-Point Zoom] menu item. Press the ◀▶ buttons to choose [On].

Check the focus.

● Press the shutter button halfway.
▶ In [Face Detect] (p. 78), the face selected as the main subject will appear magnified.
▶ In [Center] (p. 78), the contents of the center AF frame will appear magnified.

❓ What if the display does not magnify?

The display will not appear magnified in [Face Detect] if a face cannot be detected or is too big in relation to the screen. In [Center], it will not appear magnified if the camera cannot focus.

> ⬭ The magnified display will not appear when using Digital Zoom (p. 60) or Digital Tele-Converter (p. 61) or when connected to a TV (p. 76).

Shooting with the AF Lock

The focus can be locked. After locking the focus, the focal distance will not change even when you release your finger from the shutter button.

1   **Lock the focus.**

● Keep the shutter button pressed halfway and press the ◀ button.

▶ ![MF] and the MF indicator appear. You can check the distance to the subject.

2   **Compose the scene and shoot.**

Choosing the Person to Focus On (Face Select)

You can choose a specific person's face to focus on and then shoot.

1 Set Face Select mode.

- Point the camera toward the face of the subject and press the ⬚ button.
- ▶ After [Face Select : On] appears, a face frame ⌐ ⌐ will appear around the face detected as the main subject.
- Even if the subject moves, the face frame ⌐ ⌐ will follow the subject within a certain range.
- If a face is not detected, ⌐ ⌐ will not appear.

2 Choose the face on which to focus.

- If you press the ⬚ button, the face frame ⌐ ⌐ will move to another face detected by the camera.
- When the frame has made a full circuit of all detected faces, [Face Select: Off] will display, and the AF frame mode screen will reappear.

3 Shoot.

- Press the shutter button halfway. The face frame of the chosen face will change into a green ⬚.
- Press the shutter button fully to shoot.

💡 Confirming the number of detected faces

Keeping the ⬚ button pressed will display the number of faces detected by the camera (35 at the most) (orange: main subject's face, white: detected face).

Changing the Metering Mode

You can change the Metering mode (brightness measuring function) to match the shooting conditions.

1 Choose the Metering mode.

● After pressing the 🔘 button, press the ▲▼ buttons to choose 📷.

2 Choose an option.

● Press the ◀▶ buttons or turn the ◎ dial to choose an option, then press the 🔘 button.

▶ The setting will display on the screen.

📷	Evaluative	Suitable for standard shooting conditions, including back lit shots. Automatically adjusts the exposure to match the the shooting conditions.
〔〕	Center Weighted Avg.	Averages the light metered from the entire frame, but gives greater weight to the center.
〔•〕	Spot	Only meters within the 〔 〕 (Spot AE Point frame) that appears at the center of the screen.

Shooting in Manual Focus Mode

You can use manual focus when auto focus is not possible. If you press the shutter button halfway after roughly focusing manually, you can fine tune the focus.

Choose ⒨Ⓕ.

- Press the ◀ button, then press the ◀▶ buttons or turn the ◎ dial to choose ⒨Ⓕ, then press the ⓕᵤₙᶜ button again.
- ▶ ⒨Ⓕ and the MF indicator appear.

Focusing roughly.

- Using the bar that shows the distance display and AF point zoom as a guide, turn the ◎ dial while looking at the magnified display to adjust the focus.
- ▶ The image at the center of the AF frame is displayed enlarged.

Fine tuning the focus.

- If you press the shutter button halfway, you can fine tune the focus (Safety MF).

- You cannot change the AF frame setting or size while focusing manually (p. 78). If you want to change the AF frame mode or size, cancel Manual focus mode first.
- In order to focus accurately, you are recommended to fix the camera to a tripod.
- Magnified display cannot be used with the Digital Zoom (p. 60), the Digital Tele-Converter (p. 61) or when connected to a TV (p. 76), however the focus can be adjusted.
- If [MF-Point Zoom] is set to [Off] in the ◻ tab, the magnified display will not be available.
- If [Safety MF] is set to [Off] in the ◻ tab, you will not be able to fine tune the focus even if you press the shutter button.

Shooting with the AE Lock

When you wish to take several shots with the same exposure, you can set the exposure and focus separately using the AE lock. AE stands for "Auto Exposure".

1 **Lock the exposure.**

● Point the camera toward the subject and press the ✷ button while pressing the shutter button halfway.

▶ When ✶ appears, the exposure will be set.

● If you release your finger from the shutter button and press another button, ✶ will disappear and the AE will unlock.

2 **Compose the scene and shoot.**
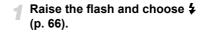
💡 Program Shift

If you lock the exposure and turn the 🔘 dial, you can change the shutter speed and aperture value combination.

Shooting with the FE Lock

Just as with the AE lock (p. 84), you can lock the exposure for shooting with the flash. FE stands for "Flash Exposure".

1 **Raise the flash and choose ↯ (p. 66).**

2 **Lock the exposure.**

● Point the camera toward the subject and press the ☒ button while pressing the shutter button halfway.

▶ The flash will fire and when ✳ appears, the flash output will be retained.

● If you release your finger from the shutter button and press another button, ✳ will disappear and the FE will unlock.

3 **Compose the scene and shoot.**

Shooting with Slow Synchro

You can make the main subject, such as people, appear bright by having the camera provide the appropriate illumination with the flash. At the same time, you can use a slow shutter speed to brighten the background that the light from the flash cannot reach.

Raise the flash.

Choose ⚡.

● After pressing the ▶ button, press the ◀▶ buttons or turn the ⊙ dial to choose ⚡, then press the ⬛ button again.

▶ Once set, ⚡ will appear on the screen.

Shoot.

● Even if the flash fires, ensure that the subject does not move until the shutter sound ends.

⚠ Attach the camera to a tripod to prevent the camera from moving and blurring the image. It is recommended to set the [IS Mode] to [Off] when shooting with a tripod (p. 121).

Setting the Shutter Speed

You can set the shutter to the speed at which you want to shoot. The camera will set the appropriate aperture value for the shutter speed you set.
Tv stands for "Time value".

1 Set the mode dial to **Tv**.

2 Make the setting.
● Turn the ◎ dial to set the shutter speed.

3 Shoot.

Available Shutter Speeds

15", 13", 10", 8", 6", 5", 4", 3"2, 2"5, 2", 1"6, 1"3, 1", 0"8, 0"6, 0"5, 0"4, 0"3, 1/4, 1/5, 1/6, 1/8, 1/10, 1/13, 1/15, 1/20, 1/25, 1/30, 1/40, 1/50, 1/60, 1/80, 1/100, 1/125, 1/160, 1/200, 1/250, 1/320, 1/400, 1/500, 1/640, 1/800, 1/1000, 1/1250, 1/1600, 1/2000, 1/2500

● 2" indicates 2 seconds, 0"3 indicates 0.3 second and 1/160 indicates 1/160 second.
● The fastest shutter speed when using the flash is 1/500 second. The camera automatically resets the shutter speed to 1/500 second if a faster speed is chosen.
● Depending on the zoom position, some shutter speeds may not be available.

❓ What if aperture value is displayed in orange?

If the aperture value displays in orange when the shutter button is pressed halfway, the scene has exceeded the correct exposure limits. Adjust the shutter speed until the aperture value displays in white. Safety shift can also be used (p. 88).

⚠ ● When shutter speeds of 1.3 seconds or slower are used, images are processed to eliminate noise after being taken. A certain amount of processing time may be needed before you can take the next shot.
● It is recommended to set the [IS Mode] to [Off] when lowering the shutter speed and shooting with a tripod (p. 121).

Setting the Aperture Value

You can set the aperture to a value at which you want to shoot. The camera will set the appropriate shutter speed for the aperture value you set.
Av stands for "Aperture value".

Set the mode dial to **Av**.

Make the setting.
● Turn the ◎ dial to set the aperture value.

Shoot.

Available Aperture Values

F2.8, F3.2, F3.5, F4.0, F4.3, F4.5, F5.0, F5.6, F6.3, F7.1, F8.0

● The fastest shutter speed when using the flash is 1/500 second. As a result, the camera will not set a shutter speed faster than 1/500 second regardless of the the aperture value you set.
● Depending on the zoom position, some aperture values may not be available.

❓ What if shutter speed is displayed in orange?

If the shutter speed displays in orange when the shutter button is pressed halfway, the scene has exceeded the correct exposure limits. Adjust the aperture value until the shutter speed displays in white. Safety shift can also be used.
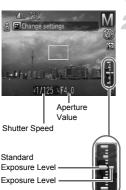
💡 Safety Shift

With **Tv** and **Av** modes, if [Safety Shift] is set to [On] in the ◻ tab, the shutter speed or aperture value is automatically adjusted for the correct exposure when it cannot otherwise be obtained.
Safety Shift is disabled when the flash is enabled.

Setting the Shutter Speed and Aperture Value

You can manually set the shutter speed and aperture to shoot images. **M** stands for "Manual".

1 **Set the mode dial to M.**

2 **Make the setting.**

- Press the ☒ button to choose the shutter speed or aperture value.
- Turn the ◎ dial to set a value.
- ▶ The set exposure level appears on the indicator. You can check the difference against the standard exposure level.
- ▶ When the difference is more than ±2 stops, the set exposure level appears in orange. When you press the shutter button halfway, "–2" or "+2" appears in orange.

Aperture Value

Shutter Speed

Standard Exposure Level

Exposure Level

Exposure Level Indicator

- The standard exposure is calculated according to the metering method chosen (p. 82).
- If you use the zoom after making settings or change the composition, the exposure level may change.
- Depending on the shutter speed or aperture value set, the monitor brightness may change. If the flash is raised and set to ✦, the monitor brightness will not change.
- If you press the ☒ button while holding down the shutter button halfway, the shutter speed or aperture value (whichever is not currently chosen) will automatically adjust to obtain the correct exposure (the correct exposure may not be obtained depending on the settings).

Correcting the Brightness and Shooting (i-Contrast)

The camera can detect areas in the scene, such as faces or backgrounds, that are too bright or dark and automatically adjust them to the optimum brightness when shooting. Also, when the overall image is lacking in contrast, the camera will automatically correct the image for a sharper impression when shooting.

🔴 ⃔T	
AF-assist Beam	On Off
MF-Point Zoom	On Off
Safety MF	On Off
Flash Settings...	
i-Contrast	◄ Auto ►
Review	◄ 2 sec. ►

Choose [i-Contrast].

● Press the **MENU** button, choose the 🔴 tab, and then choose the [i-Contrast] menu item. Press the ◀▶ buttons to choose [Auto].

▶ 𝐂ᵢ will appear on the screen.

> ⚠ Under some conditions, the image may appear coarse or may not be corrected properly.

> ✎ You can correct recorded images (p. 110).

Red-Eye Correction

You can automatically correct red-eye that occurs in images taken with the flash.

▣ ⅞T	
Continuous AF	On Off
AF-assist Beam	On Off
MF-Point Zoom	On Off
Safety MF	On Off
Flash Settings_	
i-Contrast	‹ Off ›

Choose [Flash Settings].

● Press the MENU button, choose [Flash Settings] from the ▣ tab and press the ⬤ button.

Flash Settings	
Flash Exp. Comp	‹ ±0 ›
Red-Eye Corr.	On Off
Red-Eye Lamp	On Off
Safety FE	On Off
	MENU ↩

Adjust the setting.

● Press the ▲▼ buttons or turn the ◉ dial to choose [Red-Eye Corr.] and press the ◀▶ buttons to choose [On].

▶ ⊙ will appear on the screen (p. 44).

> ⚠ Red-eye correction may be applied to red areas other than red eyes. For example, when red make-up has been used around eyes.

> ⍉ • You can correct recorded images (p. 111).
> • With the flash raised, if you press the ▶ button and immediately press the MENU button, the Flash Settings screen will appear.

Adjusting the Flash Exposure Compensation

Just like with exposure compensation (p. 67), you can adjust the exposure ±2 stops in 1/3-stop increments when using the flash.

1 **Choose ⚡.**
● After pressing the ⊛ button, press the ▲▼ buttons to choose ⚡.

2 **Make the setting.**
● Press the ◀▶ buttons or turn the ◎ dial to choose the flash exposure compensation, then press the ⊛ button.
▶ ⚡ will appear on the screen.

To set the flash exposure compensation, choose [Flash Settings] (p. 91) from the ◯ tab, then choose [Flash Exp. Comp] and press the ◀▶ buttons to choose a setting (p. 48).

👁 **Safety FE**

The camera automatically changes the shutter speed or aperture value when the flash fires to avoid overexposing and blowing out the highlights in the scene. In the ◯ tab, if [Safety FE] in [Flash Settings] is set to [Off], the shutter speed and aperture value will not automatically adjust.

Adjusting the Flash Output

In **M** mode, you can choose 3 levels of flash output.

1 Set the camera to M mode (p. 89).

2 Choose the flash output.
- After pressing the ⬤ button, press the ▲▼ buttons to choose ⚡.

3 Make the setting.
- Press the ◀▶ buttons or turn the ◯ dial to choose an option, then press the ⬤ button.

- To set the flash output, choose [Flash Settings] (p. 91) from the ◻ tab, then choose [Flash Output] and press the ◀▶ buttons to choose a setting (p. 48).
- In **Tv** and **Av** modes, you can set the flash output if you choose the ◻ tab, then [Flash Settings] and set the [Flash Mode] option to [Manual].

6

Using Various Functions for Shooting Movies

This chapter provides more advanced information than the "Shooting Movies" and "Viewing Movies" sections of Chapter 1.

- This chapter assumes that the mode dial is set to ⬝🎥 (Movie mode).

Changing the Image Quality

You can choose between three image quality settings.

1 **Choose the image quality.**
- After pressing the ⬛ button, press the ▲▼ buttons to choose ⬛.

2 **Choose an option.**
- Press the ◀▶ buttons or turn the ⬙ dial to choose an option, and press the ⬛ button.
- ▶ The setting will display on the screen.

Image Quality Table

Image Quality (Recording Pixels/Frame Rate)	Content
640 640 x 480 pixels, 30 frames/sec.	For shooting standard quality movies.
640 LP 640 x 480 pixels, 30 frames/sec. LP	The image quality will be lower than with 640 , but you can record twice the length.
320 320 x 240 pixels, 30 frames/sec.	Since the number of the recording pixels is smaller, the image quality will be lower than with 640 , but you can record three times the length.

Estimated Shooting Time

Image Quality	Shooting Time	
	2 GB	8 GB
640	16 min. 47 sec.	1 hr. 7 min. 6 sec.
640 LP	33 min. 2 sec.	2 hrs. 12 min. 3 sec.
320	46 min. 33 sec.	3 hrs. 6 min. 4 sec.

- Based on Canon's testing standards.
- Recording will automatically stop when either the clip file size reaches 4 GB or the recording time reaches approximately 1 hour.
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 4 or higher memory cards are recommended.

AE Lock/Exposure Shift

In 🎥 mode, you can set the exposure or change it in 1/3 steps within a range of ±2.

1 **Focus.**
- Press the shutter button halfway to focus.

2 **Lock the exposure.**
- After releasing the shutter button, press the ▲ button to lock the exposure. The exposure shift bar appears.
- Press the ▲ button again to release the lock.

3 **Change the exposure.**
- While watching the screen, turn the ⊙ dial to adjust the brightness.

4 **Shoot.**

Other Shooting Functions

The following functions can be used in the same way as for still images.

- **Zooming in More Closely on Subjects (Digital Zoom) (p. 60)**
  You can use the digital zoom, but the optical zoom cannot be used.
  If you want to shoot at the maximum zoom factor, you should adjust the optical zoom to the maximum before shooting.
  The sound of the zoom will be recorded.
- **Using the Self-Timer (p. 63)**
- **Shooting Close-ups (Macro) (p. 67)**
- **Adjusting the White Balance (p. 71)**
- **Changing the Tone of an Image (My Colors) (p. 73)**
- **Shooting Using the Two Second Self-Timer (p. 74)**
- **Shooting Using a TV Monitor (p. 76)**
- **Shooting with the AF Lock (p. 80)**
- **Shooting in Manual Focus Mode (p. 83)**
- **Turning off the AF Assist Beam (p. 119)**
- **Displaying the Overlay (p. 121)**
  [3:2 Guide] is not available.
- **Changing the IS-Mode Settings (p. 121)**
  You can switch between [Continuous] and [Off].

97

Playback Functions

The following functions can be used in the same way as for still images.

● **Erasing Images (p. 26)**
● **Quickly Searching Images (Index Display) (p. 100)**
● **Searching for Images Using the Jump Display (p. 101)**
● **Viewing Slideshows (p. 102)**
● **Changing Image Transitions (p. 104)**
● **Viewing Images on a TV (p. 105)**
● **Protecting Images (p. 106)**
● **Erasing All Images (p. 107)**
● **Rotating Images (p. 108)**

Summary for "Viewing Movies" (p. 33)

↰	Exit
▶	Playback
▮▶	Slow Motion Playback (you can use the ◀▶ buttons to adjust the speed. Sound will not play back.)
▮◀◀	Display the first frame
◀▮	Previous frame (Rewind if you hold down the ⓕ button.)
▮▶	Next frame (Fast forward if you hold down the ⓕ button.)
▶▶▮	Display the last frame
🖨	Appears when connected to a PictBridge compliant printer (p. 27). Refer to the *Personal Printing Guide* for details.

7

Using Playback and Other Functions

The first part of this chapter explains various ways to play back and edit images. The latter part explains how to specify images for printing.

• Press the ▶ button to enter Playback mode before operating the camera.

⚠ • It may not be possible to play back or edit images that have been edited on a computer, had their file name changed, or have been taken on a different camera.
  • The edit function (pp. 109 – 111) cannot be used if the memory card does not have free space available.

Quickly Searching Images (Index Display)

Displaying multiple images at a time lets you quickly find the image you want.

Move the zoom lever toward ▣.

▶ Images will display in an index.

● Move the zoom lever toward ▣ to increase the number of images. The number of images increases each time you move the lever.

● Move the zoom lever toward Q to reduce the number of images. The number of images will reduce each time you move the lever.

Change the displayed images.

● Turn the ⊙ dial to switch to the next set of images set in Step 1.

Choose an image.

● Press the ▲▼◀▶ buttons to choose an image.

● An orange frame appears on the chosen image.

● Press the ⌨ button to display the chosen image by itself.

Searching for Images Using the Jump Display

When there are many images on the memory card, you can search them by a specified method or image unit.

Position of currently displayed image

1 Choose a jump method.

● In Single Image Playback, press the ▲ button.
▶ The search method and the position of the currently displayed image will appear at the bottom of the screen.
● Press the ▲▼ buttons to choose the desired search method.

2 Jump to an image.

● Press the ◀▶ buttons or turn the ◎ dial.
▶ The camera will use the chosen search method to jump to an image.
● To return to Single Image Playback, press the MENU button.

⤒₁₀	Jump 10 Images	Jumps over 10 images at a time.
⤒₁₀₀	Jump 100 Images	Jumps over 100 images at a time.
⟳	Jump Shot Date	Jumps to the first image in each shooting date group.
◸	Jump to first	Jumps to still images only.
▷	Jump to Movie	Jumps to a movie.

・The number of images matching the search filter will display on the right side of the screen except for ⤒₁₀ and ⤒₁₀₀.

If there are no images matching the search filter, the ◀▶ buttons will not function.

Viewing Slideshows

You can automatically play back images recorded to a memory card.

Choose [Slideshow].

● Press the MENU button, choose [Slideshow] from the ▶ tab and press the ⊕ button.

Make the setting.

● Press the ▲▼ buttons or turn the ◯ dial to choose an item, and press the ◀▶ buttons to adjust the setting.

Repeat	Repeats playback of images
Play Time	Display time for each image
Effect	Transition effects when switching between images

Choose [Start].

● Press the ▲▼ buttons or turn the ◯ dial to choose [Start], the press the ⊕ button.

▶ The slideshow will start a few seconds after [Loading image…] displays.

● You can pause/restart a slideshow by pressing the ⊕ button again.

● Press the MENU button to stop the slideshow.
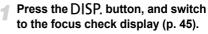
• If you press the ◀▶ buttons or turn the ◯ dial during playback, the image will switch. If you keep the ◀▶ buttons pressed, you can fast-forward through images.

• The power saving function does not work during slideshows (p. 54).

Checking the Focus

You can magnify the area of a recorded image that was inside the AF Frame, or the area of a face that was detected, to check the focus.

1 **Press the DISP. button, and switch to the focus check display (p. 45).**

- For images with detected faces, you can also switch to the focus check display by pressing the ⌊⌊ button.
- ▶ A white frame will appear where the AF frame or face was when the focus was set.
- ▶ A gray frame will appear on a face detected during playback.
- ▶ The area within the orange frame appears magnified.

2 **Switch frames.**

- Move the zoom lever toward Q once.
- ▶ The screen shown to the left will appear.
- Press the ⌊⌊ button to switch between frames of detected faces.
- Press the ⍟ button to switch between frames other than those of detected faces.

3 **Change the magnification level or location.**

- Use the zoom lever to change the display size, and the ▲▼◀▶ buttons to change the display position while checking the focus.
- Pressing the MENU button resets the display to Step 1.

Magnifying Images

Move the zoom lever toward Q.

- The display will zoom in on the image and, if you continue to hold the zoom lever, it will continue to zoom in up to a factor of 10x.
- If you press the ▲▼◆ buttons, you can move the location of the displayed area.
- Move the zoom lever toward 🔳 to zoom out or return to Single Image Playback.
- If you turn the ◎ dial, you can switch images in the zoomed state.

Approximate Location of Displayed Area

Changing Image Transitions

You can choose from two transition effects when switching between images in single image playback.

Rotate...
i-Contrast...
Red-Eye Correction...
Resize...
Resume   ◀ Last seen ▶
Transition   ◀ Fade ▶

Choose [Transition].

- Press the MENU button and choose the ▶ tab, then choose [Transition] and press the ◆ buttons to choose a transition effect.
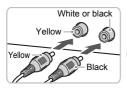
Viewing Images on a TV

Using the supplied AV Cable, you can connect the camera to a TV to view images you have shot.

Items to Prepare

● Camera and TV
● AV cable supplied with the camera (p. 2)

1 **Turn off the camera and TV.**
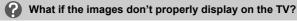
2 **Connect the camera to the TV.**
  ● Open the camera's terminal cover and fully insert the plug of the cable into the camera's terminal.
  ● Insert the cable plug fully into the video input terminals as shown in the illustration.

White or black

Yellow

Yellow

Black

3 **Turn on the TV and switch it to the input to which the cable is connected.**

4 **Turn on the camera.**
  ● Press the ▶ button to turn on the camera.
  ▶ The image will appear on the TV (nothing will appear on the monitor of the camera).
  ● After you finish viewing, turn off the camera and TV, and unplug the AV cable.

❓ What if the images don't properly display on the TV?
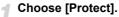
Images will not display correctly if the camera's video output setting (NTSC/PAL) does not match the TV system. Press the MENU button, choose the ᵞᵀ tab and [Video System] to switch to the correct video system.

Protecting Images

You can protect important images so that they cannot be erased by the camera (pp. 26, 30, 107).

Choose [Protect].

● Press the MENU button, choose the ▶ tab and [Protect], and then press the ⚝ button.

Protect the image.

● Press the ◀▶ buttons to choose an image, then press the ⚝ button.

▶ Once protected, |o͞m| will appear.

● Pressing the ⚝ button again deselects the image and |o͞m| will disappear.

● To protect additional images, repeat the above procedure.

● Pressing the MENU button will restore the menu screen.

> ⚠ If you format the memory card (p. 52), protected images will also be erased.
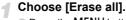
> ⬚ Protected images cannot be erased with the camera's erase function. To erase an image, cancel protection first.
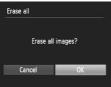
Erasing All Images

You can choose and erase all images at once. Since erased images cannot be recovered, exercise adequate caution before erasing. Protected images (p. 106) cannot be erased.

Choose [Erase all].
- Press the MENU button, choose the ▶ tab and [Erase all], and press the ⓕ button.
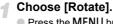
Erase all images.
- Press the ◀▶ buttons or turn the ⊚ dial to choose [OK], then press the ⓕ button.
- ▶ All images will be erased.
- Pressing the MENU button will restore the menu screen.

Rotating Images

You can change the orientation of an image and save it.

Choose [Rotate].

● Press the MENU button, choose the ▶ tab and [Rotate], and press the (func) button.
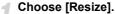
Rotate the image.

● Press the ◀▶ buttons or turn the ◯ dial to choose an image.
● The image will rotate 90° with each press of the (func) button.
● Pressing the MENU button will restore the menu screen.
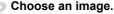
Resizing Images

You can resize images to a lower pixel setting and save the resized image as a separate file.

| Protect... |
| Rotate... |
| i-Contrast... |
| Red-Eye Correction... |
| Resize... |
| Resume ‹ Last seen › |

Choose [Resize].
● Press the MENU button and choose the ▶ tab, then choose [Resize] and press the ⏺ button.

Choose an image.
● Press the ◀▶ buttons or turn the ◉ dial to choose the image and press the ⏺ button.

Choose an image size.
● Press the ◀▶ buttons or turn the ◉ dial to choose an option, then press the ⏺ button.
▶ The [Save new image?] screen will appear.

Save the new image.
● Press the ◀▶ buttons or turn the ◉ dial to choose [OK] and press the ⏺ button.
▶ The image will be saved as a new file.

Display the new image.
● When you press the MENU button, the [Display new image?] screen will appear.
● Press the ◀▶ buttons, or turn the ◉ dial to choose [Yes] and press the ⏺ button.
▶ The saved image will display.
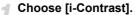
● You cannot resize an image to a larger size.
● You cannot resize images taken with the W and XS settings.

Correcting the Brightness (i-Contrast)

The camera can detect areas in an image, such as faces or backgrounds, that are too dark and automatically adjust them to the optimum brightness. Also, when the overall image is lacking in contrast, the camera will automatically correct the image for a sharper impression. You can choose 4 levels of correction: [Auto], [Low], [Medium] or [High]. Corrected images will be saved as a new file.

Slideshow...	
Erase all...	
Protect...	
Rotate...	
i-Contrast...	
Red-Eye Correction...	

Choose [i-Contrast].
● Press the MENU button, choose the ▶ tab and [i-Contrast], then press the ⬤ button.

Choose an image.
● Press the ◀▶ buttons or turn the ◯ dial to choose the image and press the ⬤ button.

Choose a menu item.
● Press the ◀▶ buttons or turn the ◯ dial to choose an option, then press the ⬤ button.

Save as a new image and display.
● Perform Steps 4 and 5 on p. 109.

? What if the image wasn't corrected by the [Auto] option as well as you would like?

Choose [Low], [Medium] or [High] and adjust the image.

> ● Under some conditions, the image may appear coarse or the exposure setting may not be suitable.
> ● Repeatedly adjusting the same image may cause the quality to deteriorate.

Correcting the Red-Eye Effect

You can automatically correct red eyes in images and save them as new files.

Choose [Red-Eye Correction].

- Press the MENU button, choose the ▶ tab and [Red-Eye Correction], then press the ⓕ button.
- ▶ The [Red-Eye Correction] screen will appear.

Choose an image.

- Press the ◀▶ buttons or turn the ◉ dial to choose an image.

Correct the image.

- Press the ⓕ button.
- ▶ Red-eye detected by the camera will be corrected and a frame will appear around the corrected portion.
- You can zoom the image using the procedures in "Magnifying Images" (p. 104).

Save as a new image and display.

- Press the ▲▼◀▶ buttons, or turn the ◉ dial to choose [New File], and press the ⓕ button.
- ▶ The image will be saved as a new file.
- Perform Step 5 on p. 109.

> - Some images may not be properly corrected.
> - When [Overwrite] in Step 4 is chosen, the uncorrected image is overwritten with the corrected data, erasing the original image.
> - Protected images cannot be overwritten.

Choosing Images for Printing (DPOF)

You can choose certain images on a memory card for printing (up to 998 images) and specify the number of print copies so they can be printed together or processed at a photo developer service. You can then print all the chosen images at once or take the memory card to a photo developer to order prints. These selection methods comply with the DPOF (Digital Print Order Format) standards.

Print Settings

You can set the print type, date and file number. These settings apply to all images chosen for printing.

▶ ◲ ⵏ	
Print	
Select Images & Qty...	
Select All Images...	
Clear All Selections...	
Print Settings...	

Choose [Print Settings].

● Press the MENU button and choose the ◲ tab, then choose [Print Settings] and press the ⏱ button.

Adjust the settings.

● Press the ▲▼ buttons or turn the ◯ dial to choose a menu item, then press the ◀▶ buttons to choose an option.

▶ Pressing the MENU button accepts the settings and restores the menu screen.

Print Type	Standard	Prints one image per page.
	Index	Prints several reduced size images per page.
	Both	Prints both standard and index formats.
Date	On	Prints the date from the shooting information.
	Off	–
File No.	On	Prints the file number.
	Off	–
Clear DPOF data	On	Removes all print settings after printing.
	Off	–

> ● Some printers or photo developer services may not be able to reflect all of the print settings in the output.
>
> ● ⬤ may appear when using a memory card with print settings set by a different camera. These settings will be overwritten with those set by your camera.
>
> ● Images with the date embedded always print with the date, regardless of the [Date] setting. As a result, some printers may print the date twice on these images if [Date] is also set to [On].

- With [Index] chosen, the [Date] and [File No.] options cannot be set to [On] at the same time.
- The date will be printed in the style set in the [Date/Time] function in the 𝔜𝗧 tab (p. 18).

Choosing the Number of Copies

1 **Choose [Select Images & Qty.].**
- Press the MENU button and choose the 𝖺 tab, then choose [Select Images & Qty.] and press the ⟨FUNC⟩ button.

2 **Choose an image.**
- Press the ◀▶ buttons or turn the ◎ dial to choose an image, then press the ⟨FUNC⟩ button.
- ▶ You will be able to set the number of print copies.
- If you choose [Index], ✓ appears on the screen. Pressing the ⟨FUNC⟩ button again will deselect the image and ✓ will disappear.

3 **Set the number of prints.**
- Press the ▲▼ buttons or turn the ◎ dial to set the number of prints (maximum 99).
- Repeat Steps 2 and 3 to choose other images and the number of prints for each.
- You cannot set the number of print copies for index prints. You can only choose which images to print.
- Pressing the MENU button accepts the settings and restores the menu screen.

Set All Images to Print Once

1 **Choose [Select All Images].**

● Choose [Select All Images] from the screen in Step 1 on p. 113 and press the $\binom{FUNC}{SET}$ button.

2 **Make print settings.**

● Press the ◀▶ buttons or turn the ◎ dial to choose [OK] and press the $\binom{FUNC}{SET}$ button.

Clearing All Selections

1 **Choose [Clear All Selections].**

● Choose [Clear All Selections] in Step 1 on p. 113, and press the $\binom{FUNC}{SET}$ button.

2 **All selections will be cleared.**

● Press the ◀▶ buttons or turn the ◎ dial to choose [OK], then press the $\binom{FUNC}{SET}$ button.

8

Customizing the Camera

You can customize various functions to suit your shooting preferences. The first part of this chapter explains convenient and commonly used functions. The latter part explains how to change shooting and playback settings to suit your purposes.

Changing Functions

You can customize convenient and commonly used functions from the 🔧 tab (p. 48).

Turning Off the Start-up Image

You can turn off the start-up image that displays when you turn on the camera.

● Choose [Start-up Image], then press the ◀▶ buttons to choose [Off].

Changing the File Number Assignment

Images you shoot are automatically assigned file numbers in the order they were taken, from 0001 – 9999, and saved to folders of up to 2,000 images. You can change the file number assignment.

● Choose [File Numbering], then press the ◀▶ buttons to choose an option.

Continuous	Even if you shoot using a new memory card, the file numbers are assigned consecutively until an image with the number 9999 is taken/saved.
Auto Reset	If you replace the memory card with a new one, file numbering begins with 0001 again.

- If you use a memory card already containing images, the newly assigned file numbers may continue the existing numbering for both the [Continuous] and [Auto Reset] settings. If you want to start over with file number 0001, format the memory card before use (p. 52).
- Refer to the *Software Guide* for information regarding folder structure or image types.

Creating Folders by Shooting Date

Images are saved into folders created each month, however, you can also create folders by shooting date.

● Choose [Create Folder] and press the ◀▶ buttons to choose [Daily].
● Images will be saved into folders created on each shooting date.

Changing the Lens Retract Time

For safety reasons, the lens retracts about 1 minute after pressing the ▶ button when in a Shooting mode (p. 25). You can set the retraction time to [0 sec.].

● Choose [Lens Retract], then press the ◀▶ buttons to choose [0 sec.].

Turning off the Power Saving Function

You can set the power saving function (p. 54) to [Off]. Setting it to [On] is recommended to save battery power.

● Choose [Power Saving], then press the (ⓕⓤⓝⓒ) button.
● Press the ▲▼ buttons or turn the ◎ dial to choose [Auto Power Down], then press the ◀▶ buttons to choose [Off].
● If you set the power saving function to [Off], be careful not to forget to turn off the camera after use.

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Setting the Screen Shut-Off Time
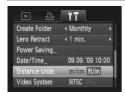
You can adjust the time the screen takes to shut off automatically (p. 54).
This also works when [Auto Power Down] is set to [Off].

Power Saving	
Auto Power Down	On Off
Display Off	◄ 1 min.
	MENU ↰

- Choose [Power Saving], then press the ⓕ button.
- Press the ▲▼ buttons or turn the ◉ dial to choose [Display Off], then press the ◄► buttons to choose a time.
- In order to save battery power, it is recommended to choose less than [1 min.].

Changing Distance Units

You can change the distance units that display in the zoom bar (pp. 22, 60) and the MF indicator (p. 83) from m/cm to ft/in.

▶ 🖧 ❣	
Create Folder	◄ Monthly ►
Lens Retract	◄ 1 min. ►
Power Saving...	
Date/Time...	09.09.'09 10:00
Distance Units	m/cm ft/in
Video System	NTSC PAL

- Choose [Distance Units], then press the ◄► buttons to choose [ft/in].

Changing Shooting Functions

If you set the mode dial to $\mathbf{P}$, you can change the settings in the ◘ tab (p. 48).

Before attempting to shoot using a function explained in this chapter in modes other than $\mathbf{P}$ mode, check if the function is available in those modes (pp. 132 – 135).

Switching the Focus Setting

The camera focuses on whatever it is aimed at even when the shutter button is not pressed. However, you can set it so that the camera only focuses when the shutter button is pressed halfway.

◘ ᵞᵀ	
AF Frame	‹ Center ›
AF Frame Size	‹ Normal ›
Digital Zoom	‹ Standard ›
AF-Point Zoom	On Off
Continuous AF	On Off
AF-assist Beam	On Off

● Choose [Continuous AF], then press the ◀▶ buttons to choose [Off].

On	Since the camera focuses continuously until you press the shutter button halfway, it allows you to shoot without missing opportunities.
Off	This conserves battery power.

Turning off the AF Assist Beam

The lamp will automatically light to assist focusing in low light conditions when you press the shutter button halfway. You can turn off the lamp.

◘ ᵞᵀ	
AF Frame Size	‹ Normal ›
Digital Zoom	‹ Standard ›
AF-Point Zoom	On Off
Continuous AF	On Off
AF-assist Beam	On Off
MF-Point Zoom	On Off

● Choose [AF-assist Beam], then press the ◀▶ buttons to choose [Off].

Turning off the Red-Eye Reduction Function

The red-eye reduction lamp lights in order to reduce the red-eye effect that occurs when shooting in dark conditions with the flash. You can turn off this function.

Flash Settings	
Flash Exp. Comp	±0
Red-Eye Corr.	Off
Red-Eye Lamp	On **Off**
Safety FE	On Off

MENU ↰

● Choose [Flash Settings], then press the (FUNC) button.
● Press the ▲▼ buttons or turn the ◎ dial to choose [Red-Eye Lamp], then press the ◀▶ buttons to choose [Off].

Changing the Image Display Time

You can change the length of time the images display directly after shooting.

▲ YT	
MF-Point Zoom	On Off
Safety MF	On Off
Flash Settings...	
i-Contrast	◀ Off ▶
Review	◀ 2 sec. ▶
Review Info	◀ Off ▶

● Choose [Review], then press the ◀▶ buttons to choose an option.

2 – 10 sec.	Displays images for the set time.
Hold	The image displays until you press the shutter button halfway.
Off	No image displays

Changing the Way the Image Displays Right After Shooting

You can change the way the image displays after shooting.

▲ YT	
Safety MF	On Off
Flash Settings...	
i-Contrast	◀ Off ▶
Review	◀ 2 sec. ▶
Review Info	◀ Focus Check ▶
Disp. Overlay	◀ Off ▶

● Choose [Review Info], then press the ◀▶ buttons to choose an option.

Off	Displays the image only.
Detailed	Displays detailed information (p. 45).
Focus Check	The area inside the AF frame is magnified, allowing you to check the focus. The procedure is the same as in "Checking the Focus" (p. 103).

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Displaying the Overlay

You can display gridlines for vertical and horizontal guidance, or a 3:2 guide to confirm the printable area for postcard size prints.

● Choose [Disp. Overlay], then press the ◀▶ buttons to choose an option.

Grid Lines	A grid overlays the display.
3:2 Guide	The areas outside the 3:2 range are grayed out. This area will not print when printing on paper with a 3:2 aspect ratio.
Both	Both grid lines, and the 3:2 guide will display.

- In **W** mode, you cannot set [3:2 Guide] or [Both].
- Grid Lines will not be recorded on the image.
- The gray areas displayed with [3:2 Guide] are the areas that will not be printed. The actual image recorded will include the portion in the gray areas.

Changing the IS-Mode Settings

● Choose [IS Mode], then press the ◀▶ buttons to choose an option.

Continuous	Image stabilization is always on. You can confirm the result directly on the display, which makes it easier to check the composition or focus.
Shoot Only	Image stabilization is only active at the moment of shooting.
Panning	Image stabilization only counters up and down motion. This option is recommended for shooting objects moving horizontally.

- If camera shake is too strong, attach the camera to a tripod. It is recommended to set the IS Mode to [Off] when the camera is attached to a tripod.
- When using [Panning], hold the camera horizontally. Image stabilization does not work when the camera is held vertically.

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Changing Playback Functions

You can adjust the settings in the ▶ tab by pressing the ▶ button (p. 48).

Choosing the Image that First Displays in Playback

● Choose [Resume], then press the ◀▶ buttons to choose an option.

| Last seen | Resumes with the image last viewed. |
| Last shot | Resumes with the most recently shot image. |

9

Useful Information

This chapter introduces date/time battery replacement, how to use the AC adapter kit (sold separately), troubleshooting tips, and contains lists of available camera functions. The index also appears at the end.

Replacing the Date/Time Battery
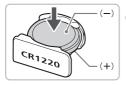
The life of the date/time battery (back-up battery) is approximately 7 years. If the Date/Time settings screen appears every time the camera is turned on, replace the date/time battery with a new one (CR1220).

1 Turn off the camera.

2 Remove the date/time battery holder.

3 Replace the battery.
 ● Insert the battery with (+) and (–) sides oriented correctly.

(–)

(+)

CR1220

4 Insert the battery holder.

5 Turn on the camera's power and set the date/time (p. 18).

Using Household Power

If you use AC Adapter Kit ACK800 (sold separately), you can use the camera without worrying about how much charge is left in the battery.

1 **Turn off the camera.**
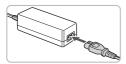
2 **Plug the cord into the camera.**

● Open the cover and fully insert the plug into the camera.

3 **Connect the power cord.**

● Connect the power cord to the compact power adapter, then plug the other end into a power outlet.
● You can turn the camera on to use it.
● After you finish, turn off the camera and unplug the power cord from the power outlet.

Do not unplug the plug and power cord with the camera turned on. This could erase images you have taken or damage the camera.

Troubleshooting

If you think there is a problem with the camera, first check the following. If the items below do not solve your problem, contact a Canon Customer Support Help Desk as listed on the included customer support list.

Power

You pressed the power button, but nothing happened.
- Confirm that the batteries are properly inserted (p. 14).
- Confirm that the batteries are not depleted (p. 16).
- Confirm that the memory card/battery cover is securely closed (p. 15).
- If the battery terminals are dirty, battery performance will decrease. Clean the terminals with a cotton swab and re-insert the batteries several times.

Batteries are consumed quickly.
- Battery performance decreases at low temperatures. Warm the batteries by, for example, placing them in your pocket, taking care that the terminals do not come into contact with any metal objects.

Lens will not retract.
- Confirm that the memory card/battery cover is securely closed. After closing the memory card/battery cover, turn the power on then back off (p. 15).

TV output

Image is distorted or not showing on TV (p. 105).

Shooting

Cannot shoot.
- Set the mode dial to the desired Shooting mode (p. 42).
- When in Playback mode (p. 25), press the shutter button halfway (p. 21).

Screen does not display properly in dark places (p. 46).

Screen does not display properly while shooting.
Please note, the following will not be recorded in still images, but will be recorded in movies.
- When the camera is subjected to powerful light sources, the display may darken.
- Under fluorescent lighting, the screen may flicker.
- When shooting bright light sources, a bar of light (purplish red) may appear on the screen.

The screen turns off and you cannot shoot when you press the shutter button halfway (p. 24).

** appears when the shutter button was pressed halfway (p. 23).**
- Set the [IS mode] to [Continuous] (p. 121).
- Raise the flash and shoot (p. 66).
- Increase the ISO speed (p. 70).
- Attach the camera to a tripod.

Image is blurred.
● Press the shutter button halfway to focus on the subject, then press fully to shoot (p. 21).
● Shoot the subject within the focusing distance (p. 138).
● Set the [AF-assist Beam] to [On] (p. 119).
● Confirm that functions which you do not intend to use (macro, etc.) are not set.
● Shoot using the focus lock or AF lock (pp. 76, 80).

Even when you press the shutter button halfway, the AF frame does not appear, and the camera does not focus.
● If you center on the light and dark contrasting area of the subject and push the shutter button halfway, or repeatedly push the shutter button halfway, the frame will appear and the camera will focus.

Subject is too dark.
● Raise the flash and set it to ✦ (p. 66).
● Adjust the brightness with exposure compensation (p. 67).
● Adjust the image with i-contrast (pp. 90, 110)
● Use the AE lock, or spot metering to shoot (pp. 82, 84).

Subject is too bright (overexposed).
● Lower the flash and set it to ⚶ (p. 23).
● Adjust the brightness with exposure compensation (p. 67).
● Use the AE lock, or spot metering to shoot (pp. 82, 84).
● Reduce the light illuminating the subject.

Image is dark even though the flash fired (p. 24).
● Increase the ISO speed (p. 70).
● Shoot within an appropriate distance for flash photography (p. 66).
● Adjust the flash exposure compensation or the flash output (pp. 92, 93).

Image taken using the flash is too bright (overexposed).
● Shoot within an appropriate distance for flash photography (p. 66).
● Lower the flash and set it to ⚶ (p. 23).
● Adjust the flash exposure compensation or the flash output (pp. 92, 93).

White dots appear on the image when shooting with the flash.
● Light from the flash has reflected off dust particles or other objects in the air.

Image appears rough or grainy.
● Shoot with the ISO speed on a lower setting (p. 70).
● Depending on the Shooting mode, when shooting in a high ISO speed the image may appear rough or grainy (pp. 57, 59).

Eyes appear red (p. 91).
● Set the [Red-Eye Lamp] to [On] (p. 120). When shooting with the flash, the lamp (on the front of the camera) lights (p. 42), and for approximately 1 second while the camera is reducing red-eye, it is not possible to shoot. It is more effective if the subject is looking directly at the lamp. Even better results can be obtained by increasing the lighting in indoor settings or approaching closer to the subject.

Recording images to the memory card takes a long time, or continuous shooting slows down.
● Perform a low-level format of the memory card in the camera (p. 53)

When you can't make settings for shooting functions or FUNC. menu.
● The items in which settings can be made differ depending on the shooting mode. Refer to Functions Available in Each Shooting Mode (pp. 132–133).

Cannot operate buttons.
● When the mode dial is set to 🖤, some buttons cannot be used (p. 29).

Shooting movies

Correct shooting time does not display, or stops.
● Format the memory card in the camera, or use a memory card capable of recording at high speeds. Even when the shooting time does not display properly, the recorded video will be the length that it was actually shot (pp. 32, 52).

🔴 appeared on the screen and shooting ended automatically.
The camera's internal memory was insufficient. Try one of the following.
● Perform a low-level format of the memory card in the camera (p. 53).
● Change the image quality setting (p. 96).
● Use a memory card capable of recording at high speeds (p. 96).

Zoom does not operate.
● You can use the digital zoom while recording, but not the optical zoom (p. 97).

Playback

Cannot play back images or movies.
● If the file name or folder structure is changed on a computer, you may not be able to play back images or movies. Refer to the *Software Guide* for information regarding folder structure or file names.

Playback stops, or audio cuts out.
● Use a memory card that has been formatted on this camera (p. 52).
● If you copy a movie to a memory card that reads slowly, playback may interrupt momentarily.
● Depending on its capabilities, the computer may drop frames, or the audio may cut out, when playing movies.

Cannot operate buttons.
● When the mode dial is set to 🖤, some buttons cannot be used (p. 30).

Computer

Cannot transfer images to a computer.
The problem may be solved by performing the following operations to slow down transfer speed when the camera is connected to a computer by a cable.
● Press and hold down the MENU button, then press the ▲ and 🔘 buttons simultaneously. Choose [B] when it appears on the screen, then press the 🔘 button.

List of Messages that Appear on the Screen

If error messages appear on the LCD monitor, try one of the following solutions.

No memory card
- The memory card is not installed in the correct direction. Install the memory card in the correct direction (p. 14).

Card locked!
- The SD memory card or SDHC memory card's write protect tab is set to "LOCK". Unlock the write protect tab (pp. 14, 17).

Cannot record!
- You attempted to shoot an image without the a memory card, or with a memory card installed incorrectly. Install the memory card in the correct direction when shooting (p. 14).

Memory card error (p. 52)
- Contact your Canon Customer Support Help Desk as there may be a problem with the camera.

Memory card full
- There is not enough free space on the memory card to shoot (pp. 22, 29, 31, 55, 65, 77) or edit images (pp. 109 – 111). Erase the images (pp. 26, 30, 107) to open space for new images, or insert an empty memory card (p. 14).

Change the batteries (p. 14)

No Image.
- There are no images recorded on the memory card that can be displayed.

Protected! (p. 106)

Unidentified Image/Incompatible JPEG/Image too large./Cannot play back MOV/RAW
- Unsupported images or data, or corrupted image data cannot be displayed.
- Images manipulated on a computer, that have had their file name changed, or have been taken with a different camera may not display.

Cannot magnify!/Cannot rotate/Cannot modify image/Cannot assign to category
- Incompatible images cannot be magnified (p. 104), rotated (p. 108), edited (pp. 109 – 111), or added to a print list (p. 112).
- Images manipulated on a computer, that have had their file name changed, or have been taken with a different camera may not be magnified, rotated, edited, or added to a print list.
- Movies cannot be magnified (p. 104).

Too many marks.
- You chose more than 998 images in print settings. Choose less than 998 images (p. 112).

Cannot complete!

● Print settings could not be saved correctly. Reduce the number of selected images and try again (p. 112).

Naming error!

● The file name could not be created because there is an image with the same name as the folder that the camera is attempting to create, or the highest possible file number has already been reached. In the 📷 menu, change [File Numbering] to [Auto Reset] (p. 116) or format the memory card (p. 52).

Communication error

● Images could not be transferred to the computer or printed due to the large amount of images (approx. 1000) stored on the memory card. Use a commercially available USB card reader to transfer the images. Insert the memory card into the printer's card slot to print.

Lens error, restart camera

● A lens error was detected. Press the power button to turn the camera off and back on (p. 42). If this error message continues to appear, contact your Canon Customer Support Help Desk as there may be a problem with the lens.
● This error can occur if you hold the lens while it is in motion or when using it in a location with excessive dust or sand in the air.

Exx (xx: number)

● A camera error was detected. Press the power button to turn the camera off and back on (p. 42).
● If an error code appears directly after taking a picture, the shot may not have been recorded. Check image in Playback mode.
● If this error code reappears, note the number and contact your Canon Customer Support Help Desk as there may be a problem with the camera.

Handling Precautions

Equipment

* This camera is a high-precision electronic device. Do not drop it or subject it to strong impacts.
* Never place the camera close to magnets or motors that generate strong electromagnetic fields. Exposure to strong magnetic fields may cause malfunctions or corrupt image data.
* If water droplets have fallen onto, or dirt is stuck on the camera or LCD monitor, wipe with a dry soft cloth or eyeglass wiper. Do not rub or apply force.
* Never use cleaners containing organic solvents to wipe the camera or LCD monitor.
* Use a commercially available blower brush to remove dust from the lens. For stubborn dirt contact the closest Canon Customer Support Help Desk as listed on the customer support leaflet supplied with your camera.
* When you move the camera rapidly from cold to hot temperatures, condensation may form on the internal or external surfaces of the camera. To avoid condensation, put the camera in an airtight, resealable plastic bag and let it adjust to temperature changes slowly before removing it from the bag.
* If condensation has formed, stop using the camera immediately. Continued use may damage the camera. Remove the battery and memory card, and wait until the moisture has completely evaporated before resuming use.

Memory Cards

* A memory card is a high-precision electronic device. Do not bend, apply force or subject it to strong impacts. Doing so may corrupt image data recorded on the memory card.
* Do not spill liquids on the memory card. Do not touch the memory card's terminals with your hands or metallic objects.
* Do not store memory cards near a TV, speakers or other devices that generate magnetic fields or static electricity. Doing so may corrupt image data recorded on the memory card.
* Do not store memory cards in hot, humid or dusty locations.

Function		M	Av	Tv	P	**AUTO**
ISO Speed (p. 70)	ISO AUTO	—	O	O	O	O
	ISO 80 100 200 400 800 1600	O	O	O	O	—
Flash (pp. 23, 29, 66, 86)*1	4^A	—	—	—	O	O
	⚡	O	O	O	O	—
	⚡⁎	—	O	—	O	—
	⚡̸	O	O	O	O	O
Focusing Zone (pp. 67, 83)	All Range	—	—	—	—	O
	✿	O	O	O	O	—
	▲	O	O	O	O	—
	MF	O	O	O	O	—
Self-Timer (pp. 63, 64, 74, 75)	off	O	O	O	O	O
	10 / 2	O	O	O	O	O
	(blink)	O	O	O	O	O
	C *3	O	O	O	O	O
Exposure Compensation (p. 67)/Exposure Shift (p. 97)		—	O	O	O	—
AF Lock (p. 80)		O	O	O	O	—
AE Lock (pp. 84, 97)/FE Lock (p. 85)		—	O	O	O	—
Face Selection (p. 81)		O	O	O	O	O
Information Display (p. 44)	On	O	O	O	O	O
	Off	O	O	O	O	O

Func. Menu						
White Balance (p. 71)	AWB	O	O	O	O	O
	☀ ☁ ☀̶ 🔆 🔆 ☀̲	O	O	O	O	—
My Colors (p. 73)	Off A_V A_N A_{Se} A_W A_C	O	O	O	O	—
Flash Exposure Compensation (p. 92)/Flash Output (p. 93)		*5	O	O	*6	—
Light Metering (p. 82)	◉	O	O	O	O	O
	[ ] [•]	O	O	O	O	—
Drive Mode (p. 72)	□ ▫ ⊞ ⊡ *8	O	O	O	O	—
Recording Pixels (pp. 68, 96)	L M1 M2 M3 S W	O	O	O	O	O
	640 320	—	—	—	—	—
Compression Ratio (Image Quality) (p. 68)	◤ ◢	O	O	O	O	O

*1 Fixed to ⚡̸ when the flash is lowered, otherwise selectable when the flash is raised.
*2 ⚡⁎ when flash fires. *3 Possible settings: 0 – 30 seconds in [Delay], and 1 – 10 shots in [Shots].
*4 FE lock not available. *5 Flash exposure compensation not available.
*6 Flash output not available. *7 ISO 3200 is set by default.

📷	👤	🏔	🧒	😊	✨	SCN								🎥
						☀	🌃	❄	🎆	🐟	🏘	🧸	ISO 3200	
O	O	O	O	O	O	O	O	O	O	O	O	O	*7	O
—	—	—	—	—	—	—	—	—	—	—	—	—	—	*7
O	O	*2	*2	O	O	*2	*2	—	O	—	O	O	O	—
—	O	*2	*2	O	O	*2	*2	—	O	O	O	O	O	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
O	O	O	O	O	O	O	O	O	O	O	O	O	O	—
O	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	O	—	O	—	—	—	O	O	O	O	O	O	O	O
—	O	O	O	O	O	O	O	O	O	O	O	O	O	O
—	O	O	O	O	O	O	—	O	O	O	O	O	O	O
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Func. Menu														
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—	O	O	O	O	O	O	O	*9	O	O	O	O	O	—
*10	O	O	O	O	O	O	O	O	O	O	O	O	O	*11
—	—	—	—	—	—	—	—	—	—	—	—	—	—	O
*12	O	O	O	O	O	O	O	O	O	O	O	O	O	—

*8 🐾 is selectable when MF is selected. *9 🐾 not selectable
*10 Fixed to L. *11 M3 is set by default. *12 Fixed to ◣.

O Selectable, or set automatically.   — Not selectable

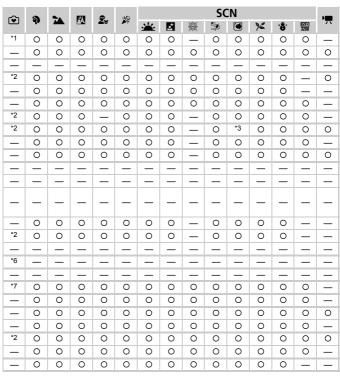# Menus

📷 Shooting Menu

Function	Shooting modes	M	Av	Tv	P	🄰🅄🅃🄾
AF Frame (p. 78)	Face Detect	○	○	○	○	*1
	Center	○	○	○	○	—
AF Frame Size (p. 78)	Normal/Small	○	○	○	○	—
Digital Zoom (p. 60)	Standard/Off	○	○	○	○	○
	Digital Tele-converter (1.4x/2.3x)	○	○	○	○	○
AF-Point Zoom (p. 79)	On/Off	○	○	○	○	○
Continuous AF (p. 119)	On/Off	○	○	○	○	*2
AF-assist Beam (p. 119)	On/Off	○	○	○	○	○
MF-Point Zoom (p. 83)	On/Off	○	○	○	○	—
Safety MF (p. 83)	On/Off	○	○	○	○	—
Flash Settings (pp. 91, 92, 93, 120)	Flash Mode — Auto/Manual	*4	○	○	—	—
	Flash Exp. Comp — -2 to +2	—	○	○	○	—
	Flash Output — Minimum/Medium/Maximum	○	○	○	—	—
	Red-Eye Corr. — On/Off	○	○	○	○	○
	Red-Eye Lamp — On/Off	○	○	○	○	○
	Safety FE — On/Off	—	*5	*5	○	—
i-Contrast (p. 90)	Auto/Off	○	○	○	○	*6
Safety Shift (p. 88)	On/Off	—	○	○	—	—
Review (p. 120)	Off/2 – 10 sec./Hold	○	○	○	○	○
Review Info (p. 120)	Off/Detailed/Focus Check	○	○	○	○	○
Disp. Overlay (p. 121)	Off/Grid Lines	○	○	○	○	○
	3:2 Guide/Both	○	○	○	○	○
IS Mode (p. 121)	Continuous/Off	○	○	○	○	*2
	Shoot Only/Panning	○	○	○	○	—
Date Stamp (p. 62)	Off/Date/Date & Time	○	○	○	○	○

*1 9 points when a face is not detected. *2 Always [On]. *3 Available when 🗲 is chosen.
*4 Fixed to [Manual]. *5 Selectable when [Flash Mode] is set to [Auto]. *6 Fixed to [Auto].
*7 Fixed to [2 sec.].

[📷]	[🐟]	[⛰]	[👶]	[👥]	[✨]	SCN								[🎬]
						[☀]	[B]	[❄]	[🌙]	[🎆]	[✂]	[⛄]	ISO 3200	
*1	O	O	O	O	O	O	O	—	O	O	O	O	O	—
—	O	O	O	O	O	O	O	O	O	O	O	O	O	O
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
*2	O	O	O	O	O	O	O	O	O	O	O	O	—	O
—	O	O	O	O	O	O	O	O	O	O	O	O	—	—
—	O	O	O	O	O	O	O	O	O	O	O	O	O	—
*2	O	O	O	—	O	O	O	—	O	O	O	O	O	—
*2	O	O	O	O	O	O	O	—	O	*3	O	O	O	O
—	O	O	O	O	O	O	O	O	O	O	O	O	O	—
—	O	O	O	O	O	O	O	O	O	O	O	O	O	—
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*6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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*7	O	O	O	O	O	O	O	O	O	O	O	O	O	—
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O Selectable, or set automatically. — Not selectable

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ᵞᵀ Set up Menu

Item	Options/Summary	Ref. Page
Mute	On/Off*	p. 49
Volume	Set all operation sounds (5 levels).	p. 49
LCD Brightness	Set within a range of ±2.	p. 50
Start-up Image	Add an image as start-up image.	p. 116
Format	Formats memory card, erasing all data	p. 52
File Numbering	Continuous*/Auto Reset	p. 116
Create Folder	Monthly*/Daily	p. 117
Lens Retract	1 min.*/0 sec.	p. 117
Power Saving	Auto Power Down: On*/Off Display Off: 10, 20 or 30 sec./1*, 2 or 3 min.	pp. 54, 117
Date/Time	Date and time settings	p. 19
Distance Units	m/cm* ft/in	p. 118
Video System	NTSC/PAL	p. 105
Language	Choose display language.	p. 20
Reset All	Returns camera to default settings.	p. 51

* Default setting

▶ Playback Menu

Item	Options/Summary	Ref. Page
Slideshow	Plays back images automatically.	p. 102
Erase all	Erases images.	p. 107
Protect	Protects images.	p. 106
Rotate	Rotates images.	p. 108
i-Contrast	Corrects dark portions and contrast in still images.	p. 110
Red-Eye Correction	Corrects red eyes in still images.	p. 111
Resize	Resizes and saves still images.	p. 109
Resume	Last seen*/Last shot	p. 122
Transition	Fade*/Slide/Off	p. 104

* Default setting

凸 Print Menu

Item	Options/Summary	Ref. Page
Print	Displays printing screen.	p. 27
Select Images & Qty.	Chooses individual images for printing.	p. 113
Select All Images	Chooses all images for printing.	p. 114
Clear All Selections	Cancels all settings for printing.	p. 114
Print Settings	Sets the printing style.	p. 112

Specifications

Camera Effective Pixels . . . . Approx. 10.0 million
Image Sensor . . . . 1/2.5-inch type CCD (Total number of pixels: Approx. 10.3 million)
Lens . . . . 6.0 (W) – 60.0 (T) mm
35mm film equivalent: 36 (W) – 360 (T) mm
f/2.8 (W) – f/4.3 (T)
Digital Zoom . . . . Approx. 4.0x (Up to approx. 40x in combination with the optical zoom)
LCD Monitor . . . . 3.0-inch type TFT LCD color monitor
Approx. 230,000 dots, Picture coverage 100%
AF Frame Mode . . . . Face Detect/Center
Focusing Range (from end of lens). . . . Auto, Easy: 5 cm (2.0 in.) – infinity (W)/
1 m (3.3 ft.) – infinity (T)
Normal: 50 cm (1.6 ft.) – infinity (W)/
1 m (3.3 ft.) – infinity (T)
Macro: 1 – 50 cm (0.4 in. – 1.6 ft.) (W)
Manual Focus: 1 cm (0.4 in.) – infinity (W)/
1 m (3.3 ft.) – infinity (T)
Kids&Pets: 1 m (3.3 ft.) – infinity
Shutter. . . . . Mechanical shutter and electronic shutter
Shutter Speed . . . . 1 – 1/2500 sec.
15 – 1/2500 sec. (Total shutter speed range)
Image Stabilization . . . . Lens-shift type
Metering System . . . . Evaluative, Center-weighted average or Spot
Exposure Compensation. . . . . ±2 stops in 1/3-stop increments
ISO speed . . . . Auto, ISO 80/100/200/400/800/1600
(Standard Output Sensitivity,
Recommended Exposure Index)
White Balance. . . . . Auto, Day Light, Cloudy, Tungsten, Fluorescent, Fluorescent H, Custom
Built-in Flash . . . . Auto, On, Slow Synchro, Off
* Flash exposure compensation/Flash output/Red-eye reduction/Red-eye correction/FE lock/Safety FE settings available
Built-in Flash Range . . . . 50 cm – 4.0 m (1.6 – 13 ft.) (W)/
1.0 – 2.5 m (3.3 – 8.2 ft.) (T)
Shooting Modes . . . . M, Av, Tv, P, Auto, Easy, Portrait, Landscape, Night Snapshot, Kids&Pets, Indoor, SCN*, Movie
*Sunset, Night Scene, Fireworks, Beach, Aquarium, Foliage, Snow, ISO 3200
Continuous Shooting. . . . . Continuous: Approx. 1.3 images/sec.
Continuous Shooting AF: Approx. 0.9 images/sec.
Continuous Shooting LV: Approx. 0.9 images/sec.
Self-timer. . . . . Approx. 10-sec./Approx. 2-sec. delay, FaceSelf-Timer, Custom Timer
i-Contrast. . . . . Auto/Off
Recording Media . . . . SD memory card, SDHC memory card, MultiMediaCard, MMCplus card, HC MMCplus card
File Format . . . . Design rule for Camera File system and DPOF compliant

Data Type	Still images: Exif 2.2 (JPEG)
	Movies: AVI (Image data: Motion JPEG, Audio data: WAVE (Mono))
Compression	Fine, Normal
Number of Recording Pixels	
(Still images)	Large: 3648 x 2736 pixels
	Medium 1: 2816 x 2112 pixels
	Medium 2: 2272 x 1704 pixels
	Medium 3: 1600 x 1200 pixels
	Small: 640 x 480 pixels
	Widescreen: 3648 x 2048 pixels
(Movies)	640 x 480 pixels (30 frames/sec.)
	640 x 480 pixels (30 frames/sec. LP)
	320 x 240 pixels (30 frames/sec.)
Number of Possible Shots	Approx. 130 images (Based on CIPA standardized measurement)
Playback Function	Single Image, Easy, Movie, Index, Jump, Magnified Focus, Magnified, Slideshow
Editing Function	Erase, Protect, Rotate, Resize, i-Contrast, Red-Eye Correction
Direct Print Type	PictBridge capable
Interface	Hi-Speed USB (Dedicated connector with unified type of digital, audio and video*)
	* mini-B compatible
	Video/Audio output (NTSC and PAL capable, mono audio)
Communication Settings	MTP, PTP
Power	2 AA-size alkaline batteries
	2 AA-size NiMH batteries (NB-3AH sold separetely)
	AC adapter kit ACK-800 (sold separetely)
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Operating Humidity	10 – 90%
Dimensions (excluding protrusions)	110.6 x 70.4 x 44.7 mm (4.35 x 2.77 x 1.76 in.)
Weight (camera body only)	Approx. 245 g (8.64 oz.)

- All data is based on tests by Canon.
- Camera specifications or appearance are subject to change without notice.

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MEMO

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